Title:

Antibiotic(s) preparation with retarding a

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Abstract:

The present invention concerns an antibiotic/antibiotics preparation f human and veterinary medicine, for the treatment of local microbial i antibiotic/antibiotics preparation is a mixture consisting of at least on the alkyl sulfates, aryl sulfates, alkylaryl sulfates, cycloalkyl sulfates, cycloalkyl sulfamates, alkylcycloalkyl sulfamates, aryl sulfamates, alk sulfonates, aryl sulfonates, alkylaryl sulfonates, cycloalkyl sulfonates, cycloalkyl disulfates, alkyl disulfonates, cycloalkyl disulfonates, aryl d trisulfonates and alkylaryl trisulfonates as well as at least one antibio antibiotics, lincosamide antibiotics, 4-quinolone antibiotics and tetrac anhydrous organic auxiliary component and if need be at least one in least one biologically active component. The antibiotic/antibiotics pre ingredient release.

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US Patent References:	3091572 May., 1963 Luedemann et al. 3536759 Oct., 1970 Jurado et al. 3882858 May., 1975 Klemm. **4059684** Nov., 1977 Gross et al. **4191740** Mar., 1980 Heusser et al. **4233287** Nov., 1980 Heusser et al. **4291013** Sep., 1981 Wahlig et al. **4617293** Oct., 1986 Wahlig et al. **5035891** Jul., 1991 Runkel et al. **5670142** Sep., 1997 Rubin. **5709875** Jan., 1998 Lebugle et al. **5807567** Sep., 1998 Randolph et al. **6485754** Nov., 2002 Wenz et al.
Foreign Patent References:	821 600 Feb., 1975 BE. 02108030.5 Mar., 2001 CN. 28 02 273 Jul., 1978 DE. 32 48 328 Jun., 1984 DE.

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Other References: Abstract of WO 9527517 from EPO website database.
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Abstract-ES 322771; Conrado Folch Vazquez, "Tetracycline lauryl sul

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Attorney, Agent or Firm: Norris McLaughlin & Marcus PA

Claims:

1. Antibiotic/antibiotics preparation, comprising a mixture of:

a) at least one amphiphilic component selected from the group of alkyl sulfates, aryl : alkylcycloalkyl sulfates, alkyl sulfamates, cycloalkyl sulfamates, alkylcycloalkyl sulfam sulfonates, fatty acid-2-sulfonates, aryl sulfonates, alkylaryl sulfonates, cycloalkyl sul cycloalkyl disulfates, alkyl disulfonates, cycloalkyl disulfonates, aryl disulfonates, alky trisulfonates and b) at least one antibiotic component selected from the group of ami quinolone antibiotics and tetracycline antibiotics;

b) at least one anhydrous, organic auxiliary component which has hydrolytically cleav hydrolytically cleavable carboxylic acid amide compounds and/or hydrolytically cleava hydrolytically cleavable phosphoric acid ester compounds and/or hydrolytically cleava enzymatically cleavable carboxylic acid ester compounds and/or enzymatically cleava enzymatically cleavable carboxylic acid anhydride compounds and/or enzymatically cl enzymatically cleavable phosphoric acid amide compounds; and

c) at least one inorganic auxiliary component selected from the group of calcium hydı dihydrate, hydroxyl apatite, fluorapatite, calcium polyphosphate, tricalcium phosphat sulfate hemihydrate, calcium sulfate dihydrate, calcium lactate, sodium hydrogen car calcium hydroxide, magnesium hydroxide, magnesium oxide group-the preceding sut highly dispersed powder-resorbable glasses, non-resorbable glasses, resorbable glass resorbable ceramics and non-resorbable ceramics.

2. Antibiotic/antibiotics preparation according to claim 1, wherein this preparation co component selected from the group consisting of penicillin antibiotics, cephalosporin a macrolide antibiotics and (b) one or more representatives selected from the group co agents, analgesics and anti-phlogistics agents.

3. Antibiotic/antibiotics preparation according to claim 1, wherein the antibiotic comp

4. Antibiotic/antibiotics preparation according to claim 1, wherein the antibiotic comp whereby chloride ions, bromide ions, hydrogen sulfate ions, sulfate ions, dihydrogen phosphate ions, acetate ions, succinate ions and lactate ions are used as counter-ion

5. Antibiotic/antibiotics preparation according to claim 1, wherein this preparation is p powders, tubes, shaped masses or threads manufactured by pressing and/or extrusic casting and/or spinning and/or sintering.

6. Antibiotic/antibiotics preparation according to claim 1, wherein the amphiphilic con suspended in the anhydrous, organic auxiliary component and form an injectable sus

7. An injectable suspension comprising an antibiotic/antibiotics preparation according

8. An implant comprising an antibiotic/antibiotics preparation according to claim 1.

9. The implant according to claim 8, which is in the form of molded elements, granul threads.

10. The implant according to claim 9, wherein the molded elements, granulates, pow plastically moldable or modelable.

11. A method of preparing an implant comprising coating an antibiotic/antibiotics pre selected from resorbable porous glasses, non-resorbable glasses, resorbable porous g ceramics, resorbable porous ceramics and non-resorbable porous ceramics.

12. A method of preparing an implant comprising coating an antibiotic/antibiotics pre selected from resorbable plastic implants, non-resorbable plastic implants and metal

13. A method of obtaining a delayed release of antibiotic/antibiotics, comprising prov according to claim 1, whereby the proportion of delay released antibiotic component said antibiotic/antibiotics preparation is determined by the ratio of the molar amount antibiotic/antibiotics preparation to the molar amount of said antibiotic component.

14. A method of preparing an implant comprising providing an implant in the form of powders, tubes, foils, shaped masses and threads, and providing an antibiotic/antibic the implant with said antibiotic/antibiotics preparation by a process comprising one o calendaring, extrusion, sintering and melting.

15. A method of treating a microbial infection in a human or animal comprising treati antibiotic/antibiotics preparation according to claim 1.

Description:

The invention concerns an antibiotic/antibiotics composition and several uses.

The treatment of local microbial infections of hard and soft tissues in human and vete concentrations in the infected tissue region. It has been known for a long time that a by a series of problems. With systemic use, it is often necessary to use very high ant antibiotics concentrations are attained in the infected tissue. In this way, severe dam aminoglucoside antibiotics and with tetracycline type antibiotics owing to their nephrc using antibiotics in locally applicable release systems or transferring them in suitable

Deposit systems for delayed release of antibiotics for the treatment of local infections and patents. These can generally be classified according to two fundamental retardin the physiological fixation of the antibiotics through adsorption to a matrix or through The second chemical delay principle consists of using sparingly soluble antibiotic salts application in the human or animal organism while active ingredients are being releas

The physical fixation of antibiotics while using non-resorbable plastics was the subjec are being presented as examples. Thus, Klemm (K. Klemm, Surgical synthetic resin r 13, 1975, U.S. Pat. No. 3,882,858) proposes treating osteomyelitis with plastic partic copolymers which are impregnated with gentamicin (or: gentamycin) or other antibio Klemm: Septopal-a new way of local antibiotic therapy. In T. J. G. Van Rens, F. H. Ka Osteomyelitis and Soft Tissue Infections, Excerpta Medica, Amsterdam (1981) 24-31; Relat. Res. 295 (1993) 63-76). This involves commercially available gentamycin-relea Dingeldein describe a composition based on antibiotics and polymethyl methacrylate additional components (D. Heuser, E. Dingeldein: Synthetic resin-base, antibiotic con

U.S. Pat. No. 4,191,740; D. Heuser, E. Dingeldein: Synthetic resin-base antibiotic co
U.S. Pat. No. 4,233,287). Furthermore, antibiotics, especially aminoglycoside antibiot
Gross, R. Schaefer, S. Reiss: Bone cement compositions containing gentamycin. Nov.
Antibiotics in acrylic bone cement. In vitro studies. J. Biomed. Mater. Res. 12 (1978)
Vereitas: Antibiotic-loaded acrylic cement. J. Bone Joint Surg. 59B (1977) 200-205.)

The physical fixation of antibiotics with the aid of resorbable plastics, especially of pol
likewise the object of a series of publications, of which only a few are reported here b
gentamycin-releasing system consisting of poly-L-lactide and gentamycin which was
lactide/gentamycin microcapsules (S. S. Sampath, K. Garvin, D. H. Robinson: Prepar
L-lactic acid) gentamycin delivery systems. Int. J. Pharmaceutics 78 (1992) 165-174
of gentamycin used, a considerable delay in active substance release. In a similar sys
active ingredient-containing microspheres (R. Bodmeier, J. W. McGinty: The preparat
lactide) microspheres formed by solvent evaporation method. Pharm. Res. 4 (1987) 4
coated with collagen/gentamycin sulfate are likewise described by Fries and Schlapp
delivery of gentamicin. Sixth World Biomaterials Congress Transactions (2000) 1488)
slight tendency to delay the release of gentamicin. Gentamicin-containing resorbable
al. (C. Schmidt, R. Wenz, B. Nies, F. Moll: Antibiotic in vivo/in vitro release, histocom
implants based on lactic acid polymers and copolymers. J. Control. Release 37 (1995
the pressing of mixtures of gentamicin sulfate/poly-L-lactide, gentamicin sulfate/poly
lactide-coglycolide. The deposit preparations released approximately ninety-percent c

In addition to the physical fixation of antibiotics using plastics, numerous inorganic sy
Below only a few systems produced with calcium sulfate are reported by way of exam
Randolph et al., which is based upon the inclusion of active ingredients in a calcium s
Devine, S. Gitelis: Calcium sulfate controlled release matrix. Sep. 15, 1998, U.S. Pat.
calcium sulfate pellets takes place here proceeding from a mixture of α-calcium sulfat
additive and water. Hardening takes place through the formation of calcium sulfate d
sulfate which contain tobramycin and which are to be used to treat medullary defects
Lawrence-Smith, D. J. Hall: Delivery of tobramycin using calcium sulfate tablets to gr
effects. Sixth World Biomaterials Congress Transactions (2000) 767). Similar release
sulfate, were likewise described (D. W. Petersen, W. O. Haggaard, L. H. Morris, K. C.
calcium sulfate pellets: An in vitro study. Sixth World Biomaterials Congress Transact

Previously, sparingly soluble salts of aminoglycoside antibiotics, tetracycline antibiotic
little attention for the manufacture of deposit preparations. The formation of hard to
tetracycline type has been the general state of knowledge for years. Thus Folch Vazq
dodecyl sulfate by the transformation of tetracycline hydrochloride with sodium dode
lauryl sulfate. Feb. 8, 1966, ES 3,309,402; C. Folch Vazquez: Tetracycline derivatives
manufacture can also take place proceeding from tetracycline and dodecyl sulfuric ac
Feb. 8, 1966, ES 322,771).

Furthermore, the use of tetracycline sulfamates for antibiotic therapy was proposed (
sulfamate and its derivatives. Oct. 27, 1970, U.S. Pat. No. 3,536,759; Anonymous: A
1969, ES 354,173; C. Ciuro, A. Jurado: Stability of a tetracycline derivative. Afinidad
soluble salts is also basically known in connection with aminoglucoside antibiotics. Th
dissolve salts based on higher fatty acids, aryl alkyl carboxylic acids, alkyl sulfates an
Luedemann, M. J. Weinstein: Gentamycin and method of production. Jul. 16, 1962, U
acid, stearic acid, palmitic acid, oleic acid or phenyl butyric acid, naphthalene-1-carb
dodecylbenzenesulfonic acid are examples of this. These salts prove disadvantageous
(or: resinous), hydrophobic substances which impede a Galenic use. Despite this, fatt
synthesized from the free base or from their salts in water at 50-80 C (H. Voege, P. S
Sparingly-soluble salts of aminoglycosides and formations containing them with inhib
3,248,328). These antibiotics-fatty acid salts are supposed to be suitable as injection
dodecyl sulfate and its use in salves (or: ointments), cremes was likewise described (
1974, BE 821,600). Even with lincosamide antibiotics, sparingly soluble salts, such as
(M. Cimbollek, B. Nies, R. Wenz, J. Kreuter: Antibiotic-impregnated heart valve sewir
endocarditis.

Antimicrob. Agents Chemother. 40(6) (1996) 1432-1437). Sparingly soluble aminogly
recent development (H. Wahlig, E. Dingeldein, R. Kirchlechner, D. Orth, W. Rogalski:

antibiotics. Oct. 13, 1986, U.S. Pat. No. 4,617,293). The salts of phosphoric acid sem hydroxy flavenes, hydroxy flavanones and hydroxy flavylium are described. The deriv preferred. The sparingly soluble salts are supposed to be used as deposit preparation mass are utilized (H. Wahlig, E. Dingeldein, D. Braun: Medicinally useful, shaped mas 1981, U.S. Pat. No. 4,291,013). Furthermore, even artificial heart valves are impregr gentamicin crobefate (M. Cimbollek, B. Nies, R. Wenz, J. Kreuter: Antibiotic-impregna prophylaxis of bacterial endocarditis. Antimicrob. Agents Chemother. 40(6) (1996) 1⁴ interesting that a mixture of easily soluble gentamicin sulfate and sparingly soluble g that, on the one hand, after introducing the heart valve rings into the organism or in concentration is reached by the easily soluble gentamicin sulfate, and on the other ha gentamicin crobefate, a release of gentamicin over a longer period of time becomes p release of gentamicin is controlled by the proportion of easily soluble gentamicin sulfa a selective adjustment of the releasing behavior, it is therefore necessary to use the ingredients into the Galenic formulations. This method of deposit formation through t with a sparingly soluble antibiotic salt presupposes the availability of a pure sparingly

In sum, it can be stated that the known antibiotic deposit systems with physically cau great extent on the composition of the matrix used. Furthermore, the production proc influence upon the releasing behavior. The disadvantage of systems with sparingly sc antibiotic used, a special form of salt must be synthesized prior to manufacture of the

Underlying the present invention is the problem of developing an antibiotic/antibiotics release as resorbable and also non-resorbable implants in the area of human and vet microbial infections in the bone and soft tissue which overcomes the disadvantages o Sought is an antibiotic/antibiotics preparation which enables a controlled antibiotics r three weeks. The mechanism of delayed active ingredient release should basically be not rest upon adsorption effects on surfaces of the supporting materials. Sought is ar processed into implants while retaining active ingredient retardation with resorbable i most varied structure. Furthermore, the method of antibiotic/antibiotics preparation s antibiotic, but rather it should be suited for a series of antibiotics of similar structure.

This problem is solved in accordance with the invention as described herein.

Underlying the invention is the surprising finding that a mixture of at least one amphi sulfates, aryl sulfates, alkylaryl sulfates, cycloalkyl sulfates, alkylcycloalkyl sulfates, a alkylcycloalkyl sulfamates, aryl sulfamates, alkylaryl sulfamates, alkyl sulfonates, fatt sulfonates, cycloalkyl sulfonates, alkylcycloalkyl sulfonates, alkyl disulfates, cycloalky disulfonates, aryl disulfonates, alkylaryl disulfonates, aryl trisulfonates and alkylaryl t component from the group of aminoglycoside antibiotics, lincosamide antibiotics and ingredient release over a period of time from several days up to several weeks in an

The following embodiments have proven especially advantageous in practice.

First of all, it is advantageous that the antibiotics preparation has at least one anhydr hydrolytically cleavable carboxylic acid ester compounds and/or hydrolytically cleavat hydrolytically cleavable carboxylic acid anhydride compounds and/or hydrolytically cle hydrolytically cleavable phosphoric acid amide compounds and/or enzymatically cleav enzymatically cleavable carboxylic acid amide compounds and/or enzymatically cleav enzymatically cleavable phosphoric acid ester compounds and/or enzymatically cleav

Furthermore, it is advantageous if the antibiotics preparation contains at least one in hydrogen phosphate, calcium hydrogen phosphate-dihydrate, hydroxyl apatite, fluora phosphate, tetracalcium phosphate, calcium sulfate, calcium sulfate hemihydrate, cal hydrogen carbonate, calcium carbonate, magnesium carbonate, calcium hydroxide, n preceding substances in the form of a coarsely dispersed and/or highly dispersed pow resorbable glass ceramics, non-resorbable glass ceramics, resorbable ceramics and n

Moreover, it is advantageous if the antibiotics preparation contains at least one biolo penicillin antibiotics, the cephalosporin antibiotics, the 4-quinolone antibiotics and the more representatives of the sulfonamide chemotherapeutic agents, analgesics and ar

In accordance with the invention, it is advantageous if the amphiphilic components fr sulfates, cycloalkyl sulfates and alkylcycloalkyl sulfates group as semi-esters are pres salt and/or ammonium salt and/or trialkyl ammonium salt and/or dialkyl ammonium triaryl ammonium salt and/or diaryl ammonium salt and/or aryl ammonium salt and/ ammonium salt and/or tricycloalkyl ammonium salt and/or dicycloalkyl ammonium ar alkyldicycloalkyl ammonium salt and/or dialkylcycloalkyl ammonium salt and or in the

Furthermore, it is advantageous in accordance with the invention that the amphiphilic 2-sulfonates, alkyl sulfamates, cycloalkyl sulfamates, aryl sulfamates, alkylaryl sulfar cycloalkyl sulfonates, alkylcycloalkyl sulfonates, alkyl disulfates, cycloalkyl disulfates, disulfonates, alkylaryl disulfonates, aryl trisulfonates and alkylaryl trisulfonates group the form of a potassium salt and/or in the form of an ammonium salt and/or in the fc of a dialkyl ammonium salt and/or in the form of a monoalkyl ammonium salt and/or the form of a diaryl ammonium salt and/or in the form of an aryl ammonium salt and and/or in the form of dialkylaryl ammonium salt and/or in the form of a tricyclealkyl a alkyldicyclo ammonium salt and/or in the form of a monocycloalkyl ammonium salt a ammonium salt and/or dialkylcycloalkyl ammonium salt and/or in the form of a sulfor anhydride.

In accordance with the invention, it is also advantageous for the antibiotic componen

Furthermore, it is advantageous in accordance with the invention that at least one co sulfates, cycloalkylalkyl sulfates, cycloalkyalkyl sulfates, aryl sulfates, alkylaryl sulfat alkylcycloalkyl sulfamates, aryl sulfamates, alkylaryl sulfamates, alkyl sulfonates, fatt cycloalkylalkyl sulfonates, aryl sulfonates and alkylaryl sulfonates with 6 to 30 carbor components.

In accordance with the invention, aryl sulfates, alkylaryl sulfates, aryl sulfamates, alk disulfonates, aryl trisulfonates and alkylaryl trisulfonates built up on the basis of mon hexacyclic, heptacyclic and octocyclic aromatic ring systems are preferred as amphipl

In accordance with the invention, cycloalkyl sulfates, alkylcycloalkyl sulfates, cycloalk sulfonates, alkylcycloalkyl sulfonates, built up on the basis of monocyclic, dicyclic, tri heptacyclic and octocyclic saturated ring systems are preferred as amphiphilic compo

In accordance with the invention, sodium dodecyl sulfate, sodium tetradecyl sulfate, sulfate, sodium docosanyl sulfate, sodium dodecyl sulfonate, sodium tetradecyl sulfor octadecyl sulfonate, sodium dodecylbenzyl sulfonate and sodium cholesterol sulfate a

Furthermore, it is in accordance with the invention that especially allomycin, amicetir butirosin, destomycin, dibekacin, dihydrostreptomycin, flambamycin, fortimycin A, fo homomycin, hybrimycin, hygromycin B, kanamycin, kasuhamycin, lividomycin, minos parvulomycin, puromycin A, ribostamycin, rimocidin, ristosamine, ristomycin, sagam streptomycin, tobramycin, tunicamycin, vancomycin, verdamycin from the aminoglyc antibiotic component.

In accordance with the invention, clindamycin and lincomycin are preferred as antibic group.

Furthermore, ciprofloxacin or moxifloxacin are preferred as antibiotic components fro

It is in accordance with the invention that tetracycline, chlorotetracycline, oxytetracy doxycycline, rolitetracycline and minocycline are preferred as antibiotic components f

It is also advantageous in accordance with the invention that the antibiotic componer chloride ions, bromide ions, hydrogen sulfate ions, sulfate ions, dihydrogen sulfate io acetate ions, succinate ions and lactate ions are preferred as counter-ions.

In accordance with the invention, it is furthermore preferred that 0.01 to 10 constitue are mixed with one molar part of the antibiotic components.

It is basic to the invention that through the ratio of the amount of amphiphilic compo proportion of the delay released antibiotic components to the overall amount of antib

It is also advantageously in accordance with the invention that at least one compoun and/or D-lactic acid and/or 2-hydroxy ethanoic acid and/or 2-hydroethoxyethanoic ac butyric acid and/or 4-hydroxy hexanoic acid and 6-hydroxy hexanoic acid, and if nee be ter-oligoester and/or ter-polyester of hydroxy carboxylic acid are used as anhydro

It is in accordance with the invention that oligoamides and/or polyamides are used as contain amino acids as components.

In accordance with the invention, the amino acids glycine and/or L-alanine and/or D- threonine and/or D-threonine and/or L-aspartic acid and/or D-aspartic acid and/or L- acid and/or D-glutamic acid and/or L-glutamine and/or D-glutamine and/or L-ornithir lysine and/or 3-amino propanoic acid and/or R-2-amino butyric acid and S-2-amino b amino butyric acid and/or R-2-amino pentanoic acid and/or S-2-amino butyric acid ar pentanoic acid and/or 5-amino pentanoic acid and/or R-2-amino hexanoic acid and/o hexanoic acid and/or 4-amino hexanoic acid and/or 5-amino hexanoic acid and/or 6- acid and/or S-2-heptanoic acid and/or 3-amino-heptanoic acid and/or 4-amino hepta amino-heptanoic acid and/or 7-heptanoic acid and/or R-2-amino octanoic acid and/or and/or 4-amino octanoic acid and/or 5-amino octanoic acid and/or 6-amino octanoic octanoic acid and/or R-2-amino nonanoic acid and/or S-2-amino nonanoic acid and/o acid and/or 5-amino nonanoic acid and/or 6 amino nonanoic acid and/or 7-amino nor 9-amino nonanoic acid and/or R-2-amino decanoic acid and/or S-2-amino decanoic a decanoic acid and/or 5-amino decanoic acid and/or 6-amino decanoic acid and/or 7-a and/or 9-amino decanoic acid and/or 10-amino decanoic acid and/or 11-amino undec phenylalanine and/or L-tyrosine and/or D-tyrosine and/or L-histidine and/or D-histidi used as building blocks of the oligoamides and polyamides.

In accordance with the invention, preferably aliphatic alcohols with a number from 12 organic auxiliary components.

It is furthermore in accordance with the invention that preferably fatty acids with a n anhydrous auxiliary components.

It is also in accordance with the invention that glycerin tri-fatty acid esters, glycerin c esters are preferred as anhydrous, organic auxiliary components, whereby the fatty a case.

It is in accordance with the invention that n-alkanes and iso-alkanes with 6 to 30 carl auxiliary components.

In accordance with the invention, that poly ethylene glycol and/or poly propylene gly 35,000 are preferred as anhydrous, organic auxiliary components.

In accordance with the invention, polyethylene oxide and polypropylene oxide with m preferred as organic auxiliary components.

In accordance with the invention, at least one compound of the gelatine, collagen, ce ethyl cellulose, hydroxy ethyl cellulose, propyl cellulose, hydroxy propylcellulose, but starch, ethyl starch, hydroxy ethyl starch, propyl starch, hydroxy propyl starch, butyl carboxymethyl chitosan, glycogen, carboxymethyl glycogen, alginic acid, alginic acid hyaluronic acid, cellulose acetate, cellulose proprionate, cellulose butyrate, cellulose starch acetate, starch proprionate, starch butyrate, starch phthalate, starch sulfate, s starch, pullulan, araban, xanthan, guar gum group is preferred as anhydrous, organic

In accordance with the invention, anhydrous, organic auxiliary components such as c collophonium and copal resin are preferred.

In accordance with the invention, at least one compound of the polyethylene, polyprc

polychlorbutadiene, polymethyl methacrylate, poly-2-hydroxymethyl methacrylate, p
polyvinyl alcohol, polyvinyl chloride, polyvinylidene chloride, polyvinyl fluoride, polyvi
polycarbonate, polysulfone, polysiloxane and mixtures of these polymers is preferred

In accordance with the invention, at least one compound from the acrylic acid ester,
methacrylic acid amide, itaconic acid ester, maleimide group and mixtures of them a
components.

In accordance with the invention, it is advantageous that the anhydrous, organic aux
state.

It is also in accordance with the invention that aryl sulfate, aryl sulfonate, aryl sulfam
components of a non-cross-linked polymer and/or a cross-linked polymer, whereby p
polyacrylates, polyamides or polycarbonates group and/or their co-polymers and/or t

In addition, it is of advantage if the antibiotics composition is present as molded elem
masses or threads manufactured by pressing and/or extrusion and/or grinding and/o
and/or sintering.

Above and beyond this, it is advantageous if the salt-like component and the antibiot
organic auxiliary component and form an injectable suspension.

Finally, it is of particular significance that the antibiotics preparation of the invention
elements, granulates, powders, tubes, foils, shaped masses and threads, especially if
This also applies for possible coatings to resorbable porous glasses, to non-resorbabl
resorbable glass ceramics, resorbable porous ceramics and non-resorbable porous ce
resorbable plastic implants and metal implants.

Through the proportion of the molar amount of amphiphilic components to the molar
proportion of delay-released antibiotic component in the overall amount of the antibi

The object of the present invention is to be explained in greater detail on the basis of

Manufacture of the antibiotic/antibiotics preparation.

EXAMPLE 1

A mixture of 51 mg of gentamicin sulfate (700 U/mg, Fluka), 51 mg of sodium dodec
mass~10,000 gmol-1) and 1118 mg calcium hydrogen phosphate (Fluka) is prepared
with a press at a pressure of 5 tons inside of two minutes to disk-like molded elemen

EXAMPLE 2

A mixture of 51 mg of gentamicin sulfate (700 U/mg, Fluka), 51 mg of sodium dodec
(molar mass~10,000 gmol-1) and 1118 mg of calcium hydrogen phosphate-dihydrate
mixture are pressed with a pressure under a pressure of 5 tons inside two minutes to
mm.

EXAMPLE 3

A mixture of 51 mg of gentamicin sulfate (700 U/mg), 51 mg of sodium dodecyl sulfa
mass~10,000 gmol-1) and 1118 mg of calcium sulfate dihydrate (Fluka) is prepared.
with a press at a pressure of 5 tons inside of two minutes to disk-like molded elemen

EXAMPLE 4

A mixture of 51 mg gentamicin sulfate (700 U/mg, Fluka), 51 mg of sodium dodecyl
(Aldrich) and 1118 mg of calcium hydrogen phosphate (Fluka) is prepared. In each c
press at a pressure of 5 tons inside of two minutes into disk-like molded elements wi

EXAMPLE 5

A mixture of 51 mg of gentamicin sulfate (700 U/mg, Fluka), 51 mg of sodium dodec (molar mass~10,000 gmol-1) and 1118 mg of calcium hydrogen phosphate (Fluka) is are pressed with a pressure under a pressure of 5 tons inside two minutes to disk-lik

EXAMPLE 6

A mixture of 51 mg of gentamicin sulfate (700 U/mg, Fluka), 51 mg of sodium dodec lactide (molar mass~10,000 gmol-1) and 1118 mg of calcium hydrogen phosphate (F mixture are pressed with a pressure under a pressure of 5 tons inside two minutes to mm.

Antibiotic Release Experiments

The molded elements prepared in examples 1-6 were introduced into a physiological period of four weeks in order to determine the retarded antibiotic release. Sampling t storage time. The antibiotics value determination was conducted with an agar diffusic germ (for results, see Table 1).

TABLE 1
Cumulative gentamicin release from sample elements from examples 1-6 as a functic 37° C.

Cumulative gentamicin release (Ma %) Storage time (d)							
Examples	1	3	6	9	12	14	21	51
1	32	54	67	72	77	83	94	100
2	45	54	63	71	77	82	88	100
3	48	57	64	78	84	91	100	1(
100	100	100						
6	77	82	86	90	94	97	100	100

<- Previous Patent (Method and device for enhanced delivery ..) | bioresorbable ..) ->

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Completed processing all files
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       17881580  TREAT?
        5285661  BACTERIA?
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S2	46	RD (unique items)

>>>KWIC option is not available in file(s): 399

2/3,K/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0015083805 BIOSIS NO.: 200400465034
Common oligosaccharide moieties inhibit the adherence of typical and atypical respiratory pathogens
AUTHOR: Thomas Richard (Reprint); Brooks Tim
AUTHOR ADDRESS: Biomed Sci, Dstl, Porton Down, Salisbury, Wilts, SP4 0JQ, UK**UK
AUTHOR E-MAIL ADDRESS: rjthomas@dstl.gov.uk
JOURNAL: Journal of Medical Microbiology 53 (9): p833-840 September 2004
2004
MEDIUM: print
ISSN: 0022-2615 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Intervention in **bacterial** adhesion to host cells is a novel method of overcoming current problems associated with antibiotic resistance. Anti biotic-resistant strains of **bacteria** that cause respiratory tract infections are a problem in hospitals and could be used in bioterrorist attacks. A range of **bacterial** species was demonstrated to attach to an alveolar epithelial (A549) cell line. In all cases...
...surface oligosaccharides were important in attachment, demonstrated by reduced adhesion when A549 cells were pre- **treated** with **tunicamycin** . Bacillus anthracis and Yersinia pestis displayed a restricted tropism for oligosaccharides compared to the environmental...

2/3,K/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014808806 BIOSIS NO.: 200400179563
Oligosaccharide receptor mimics inhibit Legionella pneumophila attachment to human respiratory epithelial cells.
AUTHOR: Thomas Richard J (Reprint); Brooks Tim J
AUTHOR ADDRESS: Biomedical Sciences, Defence, science and technology laboratories (DSTL), CBS Porton Down, Salisbury, Wiltshire, SP4 0JQ, UK** UK
AUTHOR E-MAIL ADDRESS: rjthomas@dstl.gov.uk
JOURNAL: Microbial Pathogenesis 36 (2): p83-92 February 2004 2004
MEDIUM: print
ISSN: 0882-4010 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: the key step during infection, often relying on an interaction between host cell oligosaccharides and **bacterial** adhesins. Inhibition of this interaction by receptor mimics offers possible novel therapeutic **treatments** . L. pneumophila attachment to the A549 cell line was significantly reduced by **treatment** with **tunicamycin** (73.6%) and sodium metaperiodate (63.7%). This indicates the importance of cell surface oligosaccharide...

...saccharide moiety, GalNAcbeta1-4Gal. The identified compounds have the potential to be used as novel **treatments** for Legionnaire's disease.

2/3,K/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014523771 BIOSIS NO.: 200300477726
Absence of superoxide dismutase activity in a soluble cellular isoform of prion protein produced by baculovirus expression system.
AUTHOR: Sakudo Akikazu; Hamaishi Michiko; Hosokawa-Kanai Tomoko; Tuchiya Kotaro; Nishimura Takuya; Saeki Keiichi; Matsumoto Yoshitsugu; Ueda Susumu; Onodera Takashi (Reprint)
AUTHOR ADDRESS: Department of Molecular Immunology, School of Agricultural and Life Sciences, University of Tokyo, Bunkyo-ku, Tokyo, 113-8657, Japan **Japan
AUTHOR E-MAIL ADDRESS: aonoder@mail.ecc.u-tokyo.ac.jp
JOURNAL: Biochemical and Biophysical Research Communications 307 (3): p 678-683 August 1, 2003 2003
MEDIUM: print
ISSN: 0006-291X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: but in the perinuclear endoplasmic reticulum region in cells and is secreted into the media. **Tunicamycin treatment** revealed non-glycosylated proteins were secreted into the media, suggesting that glycosylation is not necessary...

...These results suggest that bacMuPrP has a different biochemical and biophysical characterization from mammalian and **bacterial** -derived PrP.

Furthermore, this simple expression system may provide an adequate source for structural, functional...

2/3,K/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014322411 BIOSIS NO.: 200300291130
Binding of extracellular matrix molecules by enterococci.
AUTHOR: Styriak Igor (Reprint); Ljungh Asa
AUTHOR ADDRESS: Department of Microbiology, Institute of Animal Physiology, Slovak Academy of Sciences, Soltesovej 4-6, 040 01, Kosice, Slovakia** Slovakia
AUTHOR E-MAIL ADDRESS: styriak@saske.sk
JOURNAL: Current Microbiology 46 (6): p435-442 June 2003 2003
MEDIUM: print
ISSN: 0343-8651
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The **bacterial** surfaces of enterococci are not uniform. This fact is confirmed by several studies and by...

...of eight selected strains tested in microtiter plates and by PAA. Moreover, the influence of **tunicamycin treatment** was different because significant ($P < 0.001$) blocking effect of **tunicamycin** was observed with two selected strains (HJ 26 and HJ 36), whereas two strains (HJ 18 and HJ 22) were not significantly affected in their fetuin binding. The **treatment** of six enterococcal strains with proteolytic enzymes, pronase P, and trypsin, and with sodium metaperiodate...

2/3,K/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014306973 BIOSIS NO.: 200300265617
Characterization of a modified substrate for translocase (MraY) enzyme assay of E. coli.
AUTHOR: Raphael P (Reprint); Gayathri C N (Reprint); Barde S P (Reprint); Solapure S (Reprint); Das K S (Reprint)
AUTHOR ADDRESS: AstraZeneca India Pvt Ltd, Bangalore, India**India
JOURNAL: Abstracts of the Interscience Conference on Antimicrobial Agents and Chemotherapy 42 p192 2002 2002
MEDIUM: print
CONFERENCE/MEETING: American Society for Microbiology (ASM) Annual Meeting on Infectious Disaease San Diego, CA, USA September 27-30, 2002; 20020927
SPONSOR: American Society for Microbiology
DOCUMENT TYPE: Meeting; Meeting Poster; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Background: Enzymes responsible for synthesis of the peptidoglycan (PG) of **bacterial** cell wall are well-validated targets for antibacterial drug discovery. The translocase (MraY) catalyzes the...

...use in the MraY assay. Methods: The modified substrate, (p)-UDP-MPP* was prepared by **treating** the substrate UDP-MPP with N-Succinimidyl

(3H)propionate. E. coli membranes were incubated with...

...reaction with UMP. This assay was shown to be selectively inhibited by the MraY inhibitor **tunicamycin** (IC50apprx0.2mug/ml) but not with other PG inhibitors like nisin or beta-lactams. Conclusions...

2/3,K/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014229286 BIOSIS NO.: 200300188005
Characterization of a novel ubiquitin-fusion gene Uba256 from Spodoptera litura nucleopolyhedrovirus.
AUTHOR: Li Zhaofei; Gong Yingxue; Yin Chong; Wang Lihua; Li Chongbi; Pang Yi (Reprint)
AUTHOR ADDRESS: State Key Laboratory for Biocontrol, Institute of Entomology, Zhongshan University, Guangzhou, 510275, China**China
AUTHOR E-MAIL ADDRESS: ls12@zsu.edu.cn
JOURNAL: Gene (Amsterdam) 303 p111-119 16 January, 2003 2003
MEDIUM: print
ISSN: 0378-1119 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: proteins. The GP37 protein also showed a distant similarity to Pseudaletia separata entomopoxvirus enhancing factor, **bacterial** chitinase B and chitin-binding protein 1, but the significance of this is unclear. The...

...expression Uba256 gene in Escherichia coli did not result in processing of the fusion protein. **Tunicamycin treatment** of SpltMNPV-infected cells confirmed that SpltMNPV GP37 protein is N-glycosylated. These findings provide...

2/3,K/7 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0012733906 BIOSIS NO.: 200000452219
Characterization of human HtrA2, a novel serine protease involved in the mammalian cellular stress response
AUTHOR: Gray Carol W; Ward Robin V; Karran Eric; Turconi Sandra; Rowles Alison; Viglienghi Daniela; Southan Christopher; Barton Amanda; Fantom Kenneth G; West Andrew; Savopoulos John; Hassan Namir J; Clinkenbeard Helen; Hanning Charles; Amegadzie Bernard; Davis John B; Dingwall Colin (Reprint); Livi George P; Creasy Caretha L
AUTHOR ADDRESS: Neuroscience Research, SmithKline Beecham Pharmaceuticals, New Frontiers Science Park North, Third Avenue, Harlow, Essex, CM19 5AW, UK**UK
JOURNAL: European Journal of Biochemistry 267 (18): p5699-5710 September, 2000 2000
MEDIUM: print
ISSN: 0014-2956
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: family and shows extensive homology to the Escherichia coli HtrA genes that are essential for **bacterial** survival at high temperatures. HumHtrA2 is also homologous to human HtrA1, also known as L56...

...is upregulated in mammalian cells in response to stress induced by both heat shock and **tunicamycin treatment** . Biochemical characterization of humHtrA2 shows it to be predominantly a nuclear protease which undergoes autoproteolysis...

...raised from 37 to 45 degreeC. The biochemical and sequence similarities between humHtrA2 and its **bacterial** homologues, in conjunction with its nuclear location and upregulation in response to **tunicamycin** and heat shock suggest that it is involved in mammalian stress response pathways.

2/3,K/8 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0012108654 BIOSIS NO.: 199900368314
Identification and expression of two baculovirus gp37 genes
AUTHOR: Phanis C G; Miller D P; Cassar S C; Tristem M; Thiem S M; O'Reilly D R (Reprint)
AUTHOR ADDRESS: Department of Biology, Imperial College, Imperial College Road, London, SW7 2AZ, UK**UK
JOURNAL: Journal of General Virology 80 (7): p1823-1831 July, 1999 1999
MEDIUM: print
ISSN: 0022-1317
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: gene transfer between the two groups. The gp37 genes also showed a distant similarity to **bacterial** cellulose- and chitin-binding protein genes, but the significance of this is unclear. MbMNPV and...

...transcription start sites. MbMNPV gp37 was additionally transcribed from a putative early transcription start site. **Tunicamycin treatment** of MbMNPV-infected cells confirmed that MbMNPV GP37 is N-glycosylated. Confocal immunofluorescence microscopy revealed...

2/3,K/9 (Item 9 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0011831461 BIOSIS NO.: 199900091121
Enzymatic characteristics of recombinant medium isozyme of 2'-5' oligoadenylate synthetase
AUTHOR: Sarkar Saumendra N; Bandyopadhyay Smarajit; Ghosh Arundhati; Sen Ganes C (Reprint)
AUTHOR ADDRESS: Dep. Molecular Biol., Lerner Res. Inst., Cleveland Clinic Foundation, 9500 Euclid Ave., NC20, Cleveland, OH 44195, USA**USA
JOURNAL: Journal of Biological Chemistry 274 (3): p1848-1855 Jan. 15, 1999 1999
MEDIUM: print
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: synthetases. In this study, recombinant P69 was expressed and used for enzymological and structural investigations. **Bacterially** expressed P69 was inactive whereas the same protein expressed in insect cells was highly active...

...protein was not necessary for enzyme activity. In contrast, inhibition of glycosylation of P69, by **tunicamycin treatment** of the insect cells, produced an enzymatically inactive protein. Recombinant P69 produced in insect cells...

2/3,K/10 (Item 10 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0011769287 BIOSIS NO.: 199900028947
Antigenic and immunological mimicry of peptide mimotopes of Lewis carbohydrate antigens
AUTHOR: Luo Ping; Agadjanyan Michael; Qiu Jianping; Westerink M A Julie; Steplewski Zenon; Kieber-Emmons Thomas (Reprint)
AUTHOR ADDRESS: Dep. Pathol. Lab. Med., Univ. Pa., Philadelphia, PA 19104, USA**USA
JOURNAL: Molecular Immunology 35 (13): p865-879 Sept., 1998 1998
MEDIUM: print
ISSN: 0161-5890
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: mimic mucin and histo-blood group related carbohydrate epitopes, eliciting polyclonal responses cross-reactive with **bacterial** and viral antigens that express these carbohydrate forms. These results demonstrate that peptides can function...

...but not to normal tissues. Immunoprecipitation of human breast tumor cell lysates before and after **treatment** with **tunicamycin** confirmed serum carbohydrate binding. The anti-peptide sera mediated tumor cell killing by complement mediated...

2/3,K/11 (Item 11 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0011519452 BIOSIS NO.: 199800313699
Non-glycosylated human B7-1(CD80) retains the capacity to bind its counter-receptors
AUTHOR: Chen Aoshuang; Meyerson Howard J; Salvekar Anupama; Tykocinski Mark L (Reprint)
AUTHOR ADDRESS: Inst. Pathol., Casé Western Reserve Univ., Cleveland, OH 44106, USA**USA
JOURNAL: FEBS Letters 428 (3): p127-134 May 29, 1998 1998
MEDIUM: print
ISSN: 0014-5793
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: glycosylation on human B7-1 function. First, stable K562 transfectants expressing human B7-1 were **treated** with the N-glycosylation inhibitor **tunicamycin** . This **treatment** reduced the levels of B7-1 at the cell surface as judged by both indirect...

...flow cytometry and immunoprecipitation analyses. Significantly, the non-glycosylated cell surface-associated B7-1 on **tunicamycin - treated** cells retained the capacity to bind CTLA-4-Ig, a soluble derivative of the CTLA-4(CD152) counter-receptor. Second, experiments were performed with **bacterially** -produced non-glycosylated derivatives of human B7-1, comprising either the complete B7-1 extracellular...

...with counter-receptors. Moreover, the findings pave the way for the therapeutic use of recombinant **bacterial** B7-1 derivatives as competitive inhibitors of B7-mediated signals.

2/3,K/12 (Item 12 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0011438582 BIOSIS NO.: 199800232829
Activity of N-acetylglucosamine-1-phosphate transferase in sheep liver microsomes: In vivo and in vitro inhibition by tunicamycin
AUTHOR: Stewart P L (Reprint)
AUTHOR ADDRESS: CSIRO Australian Anim. Health Lab., Private Bag 24, Geelong, VIC 3220, Australia**Australia
JOURNAL: Research in Veterinary Science 64 (1): p31-35 Jan.-Feb., 1998 1998
MEDIUM: print
ISSN: 0034-5288
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The neurological disease of livestock known as annual ryegrass toxicity, caused by ingestion of **bacteria**) toxins called corynetoxins, has been shown to be produced experimentally by injection of **tunicamycin** , a related antibiotic. In this study the effects of **tunicamycin** inhibition on the activity of the enzyme, N-acetylglucosamine-1-phosphate transferase, in sheep liver...
...to in vitro (inhibition can be detected below 10 ng ml-1). In vivo, sheep **treated** parenterally with a single dose of **tunicamycin** showed a time and dose-dependent decrease in enzyme activity, which was almost completely inhibited...

...sublethal dose of toxin. In addition, the yield of rough microsomes was lower from toxin- **treated** sheep than from control animals.

2/3,K/13 (Item 13 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0010869787 BIOSIS NO.: 199799503847
Combinatorial antibodies against human malignant melanoma
AUTHOR: Pereira S; Van Belle P; Elder D; Maruyama H; Jacob L; Sivanandham M ; Wallack M; Siegel D; Herlyn D (Reprint)
AUTHOR ADDRESS: Wistar Inst., 3601 Spruce St., Philadelphia, PA 19104, USA **USA

JOURNAL: Hybridoma 16 (1): p11-16 1997 1997
ISSN: 0272-457X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: expression of cell-surface-reactive antibodies, without the need for antibody production and purification using **bacteria** or eukaryotic cell systems. This approach was used to identify melanoma-associated cell-surface antigens...

...human lymphocyte antigen nonmatched and vaccine melanoma cells). Phages were further selected for reactivities with **tunicamycin - treated** melanoma cells. These procedures resulted in a gt 10-6-fold enrichment of tumor-specific...

2/3,K/14 (Item 14 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0010513529 BIOSIS NO.: 199699147589
Effects of the lantibiotic mersacidin on the morphology of staphylococci
AUTHOR: Molitor E (Reprint); Kluczny C; Broetz H; Bierbaum G; Jack R; Sahl H G
AUTHOR ADDRESS: Inst. Med. Mikrobiol. Immunol., Univ. Bonn, Sigmund-Freud-Strasse 25, D-53105 Bonn, Germany**Germany
JOURNAL: Zentralblatt fuer Bakteriologie 284 (2-3): p318-328 1996 1996
ISSN: 0934-8840
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: containing peptide antibiotic (lantibiotic), able to inhibit the growth of a number of Gram-positive **bacteria** including methicillin-resistant Staphylococcus aureus (MRSA) in a manner similar to, but distinct from, vancomycin...

...to further understand the mode of action of this lantibiotic, Staphylococcus simulans 22 cells were **treated** either with the antibiotics penicillin, **tunicamycin** or vancomycin or with metsacidin and then compared with untreated cells after electron microscopic examination. Mersacidin **treatment** brought about a time-dependent, generalized decrease in the thickness of the **bacterial** cell wall. In addition, mersacidin **treatment** caused a roughening of the cell wall surface layer and also reduced the thickness and...

2/3,K/15 (Item 15 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0009904568 BIOSIS NO.: 199598372401
A novel signal transduction pathway for the endoplasmic reticulum to the nucleus is mediated by transcription factor NF-kappa-B
AUTHOR: Pahl Heike L (Reprint); Baeuerle Patrick A
AUTHOR ADDRESS: Inst. Biochem., Albert Ludwigs Univ., Hermann Herder Str. 7, D-79104 Freiburg, Germany**Germany
JOURNAL: EMBO (European Molecular Biology Organization) Journal 14 (11): p 2580-2588 1995 1995

ISSN: 0261-4189
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: kappa-B is activated by a variety of external stimuli including inflammatory cytokines, viral and **bacterial** infection and UV irradiation. Here we show that internal stress, caused by the accumulation of...

...observed upon expression of immunoglobulin mu chains in the absence of light chains and by **treatment** of cells with several agents known to cause ER stress, such as **tunicamycin** , brefeldin A, 2-deoxyglucose and thapsigargin. The transcription factor AP-1 was weakly induced under...

2/3,K/16 (Item 16 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0009805992 BIOSIS NO.: 199598273825
Immunogenicity enhancement of recombinant rabbit 55-kilodalton zona pellucida protein expressed using the baculovirus expression system
AUTHOR: Prasad Sarvamangala V; Mujtaba Shiraz; Lee Vaughan H; Dunbar Bonnie S (Reprint)
AUTHOR ADDRESS: Dep. Cell Biol., Baylor Coll. Med., One Baylor Plaza, Houston, TX 77030, USA**USA
JOURNAL: Biology of Reproduction 52 (5): p1167-1178 1995 1995
ISSN: 0006-3363
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: as two forms having relative molecular masses of 70 kDa and 80 kDa. Because cells **treated** with **tunicamycin** produce predominantly the 70-kDa form, this heterogeneity is presumed to be due to differential...

...recombinant forms of the rabbit 55-kDa ZP protein. In contrast, recombinant protein expressed in **bacteria** did not elicit antibodies in either rabbits or guinea pigs. These results demonstrate that expression ...

2/3,K/17 (Item 17 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0009720328 BIOSIS NO.: 199598188161
Receptor specificity of adherence of Streptococcus pneumoniae to human type-II pneumocytes and vascular endothelial cells in vitro
AUTHOR: Cundell Diana R; Tuomanen Elaine I (Reprint)
AUTHOR ADDRESS: Lab. Molecular Infectious Diseases, Rockefeller Univ., 1230 York Ave., New York, NY 10021-6399, USA**USA
JOURNAL: Microbial Pathogenesis 17 (6): p361-374 1994 1994
ISSN: 0882-4010
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: this interaction. Pneumococcal receptors on cultured human LC

and EC appeared to be glycoproteins since **treatment** of the monolayers with **tunicamycin** significantly impaired **bacterial** adherence. Inhibition of adherence to LC and EC occurred following incubation with several carbohydrates including...

...bind directly to these immobilized sugars and their addition to adherent pneumococci could elute the **bacteria** from LC and EC. Combinations of glycoconjugates indicated that two independent classes of pneumococcal receptor...

2/3,K/18 (Item 18 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0009102349 BIOSIS NO.: 199497123634
Conformationally appropriate expression of the toxoplasma antigen SAG1 (p30) in CHO cells
AUTHOR: Kim Kami; Bulow Roland; Kampmeier Jennifer; Boothroyd John C (Reprint)
AUTHOR ADDRESS: Dep. Microbiol. Immunol., Fairchild D305, Sch. Med., Stanford, CA 94305-5402, USA**USA
JOURNAL: Infection and Immunity 62 (1): p203-209 1994 1994
ISSN: 0019-9567
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: a diagnostic reagent, as a potential subunit vaccine, and for its role in invasion. Unfortunately, **bacterial** recombinant protein is grossly misfolded so that, for example, it is not effectively recognized by...

...SAG1 that is recognized by antiserum specific for natural, nonreduced SAG1, indicating that, unlike in **bacteria** , expression in CHO cells results in proper folding. Processing was at least partially correct in ...

...natural SAG1, recombinant SAG1 was attached to the plasma membrane via a glycolipid anchor, although **tunicamycin treatment** was necessary to prevent N-glycosylation (SAG1 is not glycosylated in the parasite but does...

2/3,K/19 (Item 19 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0008960929 BIOSIS NO.: 199396125345
Identification of an infectious laryngotracheitis virus gene encoding an immunogenic protein with a predicted M-r of 32 kilodaltons
AUTHOR: Kongsuwan Kritaya (Reprint); Johnson Michael A; Prideaux Christopher T; Sheppard Michael
AUTHOR ADDRESS: CSIRO Div. Anim. Health, Anim. Health Res. Lab., Private Bag 1, Parkville, Victoria 3052, Australia**Australia
JOURNAL: Virus Research 29 (2): p125-140 1993
ISSN: 0168-1702
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: simplex virus type 2 (HSV-2) and equine herpesvirus type 4 (EHV-4). High level **bacterial** production of the p32 protein was achieved by cloning the p32 open reading frame into...

...amount of p32 protein in the medium of ILTV-infected cells in Western blotting. Moreover **tunicamycin** **treatment** of cells infected with the virus indicated that p32 was glycosylated. This allows us to...

2/3,K/20 **(Item 20 from file: 5)**
DIALOG(R)File 5:Biosis Previews(R)

0008784540 BIOSIS NO.: 199395086806
Guanylyl cyclase C is an N-linked glycoprotein receptor that accounts for multiple heat-stable enterotoxin-binding proteins in the intestine
AUTHOR: Vaandrager Arie B; Schulz Stephanie; De Jonge Hugo R; Garbers David L (Reprint)
AUTHOR ADDRESS: Howard Hughes Med. Inst., University Texas Southwestern Med. Center Dallas, 5323 Harry Hines Blvd., Dallas, TX 75235-9050, USA** USA
JOURNAL: Journal of Biological Chemistry 268 (3): p2174-2179 1993
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: a newly discovered receptor found in the intestine, and possibly in other epithelia, that binds **bacterial** heat-stable enterotoxins (STa). The receptor has now been stably expressed in human embryonic 293...

...expressing GC-C. Both proteins bound to wheat germ lectin-Sepharose, and N-glycosidase F **treatment** converted both forms to a single M-r 120,000 protein, the size produced from amino acid composition. The addition of high concentrations of **tunicamycin** to 293-GC-C cells also reduced the M-r to 120,000, indicating that...

...M-r ranging between 45,000 and 80,000. On immunoblots of rat intestinal membranes **treated** with a reducing agent, 3 major proteins of M-r 65,000, 85,000, and...

2/3,K/21 **(Item 21 from file: 5)**
DIALOG(R)File 5:Biosis Previews(R)

0008196754 BIOSIS NO.: 199293039645
NEW METHODS FOR THE HIGHLY SELECTIVE ISOLATION OF STREPTOSPORANGIUM AND DACTYLOSPORANGIUM FROM SOIL
AUTHOR: HAYAKAWA M (Reprint); KAJIURA T; NONOMURA H
AUTHOR ADDRESS: DEP FERMENTATION TECHNOLOGY, FACULTY ENGINEERING, YAMANASHI UNIV, TAKEDA-4, KOFU 400, JPN**JAPAN
JOURNAL: Journal of Fermentation and Bioengineering 72 (5): p327-333 1991
ISSN: 0922-338X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: sporangiospores of Streptosporangium and the globose bodies (aleuriospore) of Dactylosporangium to withstand dry heating and **treatment** with benzethonium chloride (BC). In addition, the differential antibiotic resistance of these actinomycetes is also...

...i) To isolate streptosporangia, an air-dried soil sample is first subjected to dry heat **treatment** (120.degree. C, 1 h). A water suspension of the heated sample is then **treated** with 0.01% BC, diluted and cultured on HV agar supplemented with nalidixic acid and...
...dactylosporangia, a water suspension of a soil sample given dry heat and 0.03% BC **treatment** is cultured on HV agar supplemented with nalidixic acid and **tunicamycin** . The dry heat and BC **treatment** drastically eliminated **bacteria** and unwanted actinomycetes contaminants, including streptomycetes, from the isolation plates, thereby facilitating the selective isolation...

...in HV agar was useful to suppress the growth of dry heat- and BC-resistant **bacteria** . The use of leucomycin and **tunicamycin** increased the selectivity of HV agar for streptosporangia and dectylosporangia, respectively, through elimination of the...

2/3,K/22 (Item 22 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0008196753 BIOSIS NO.: 199293039644
NEW METHODS FOR THE HIGHLY SELECTIVE ISOLATION OF MICROMONOSPORA AND MICROBISPORA FROM SOIL
AUTHOR: HAYAKAWA M (Reprint); SADAKATA T; KAJIURA T; NONOMURA H
AUTHOR ADDRESS: DEP FERMENTATION TECHNOLOGY, FACULTY ENGINEERING, YAMANASHI UNIV, TAKEDA-4, KOFU 400, JPN**JAPAN
JOURNAL: Journal of Fermentation and Bioengineering 72 (5): p320-326 1991
ISSN: 0922-338X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: deleterious agents. (i) To isolate micromonosporae, a water suspension of air-dried soil is first **treated** with 1.5% phenol, diluted with water and then cultured on HV agar supplemented with both **tunicamycin** and nalidixic acid. (ii) To isolate microbiosporae, air-dried soil is heated in a hot...

...120.degree. C for 1 h. A water suspension of the heated sample is then **treated** with a solution of 1.5% phenol and 0.03% chlorhexidine gluconate (CG), diluted and cultured on HV agar supplemented with nalidixic acid. The phenol pretreatment of the soil killed **bacteria** and streptomycetes in the samples, while keeping micromonosporae and microbisporae alive. The use of **tunicamycin** suppressed the growth of the remaining microbisporae on HV agar isolation plates, thereby facilitating the intensive isolation of micromonosporae. On the other hand, the dry heat **treatment** of the soil drastically reduced the number of **bacteria** in the sample and significantly reduced the numbers of streptomycetes and micromonosporae, without reducing the microbisporae content. Further **treatment** with a mixture of phenol and CG eliminated dry heat-resisting actinomycetes apart from microbisporae. Dilution plating of samples subjected to heat and the phenol-CG **treatment** resulted in the intensive isolation of microbisporae on HV agar. From various field soils (vegetable...

2/3,K/23 (Item 23 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0007345544 BIOSIS NO.: 199090130023
NEUTRALIZATION OF POLIOVIRUS BY CELL RECEPTORS EXPRESSED IN INSECT CELLS
AUTHOR: KAPLAN G (Reprint); FREISTADT M S; RACANIELLO V R
AUTHOR ADDRESS: DEP MICROBIOL, COLLEGE PHYSICIANS SURGEONS, COLUMBIA UNIV, 701 WEST 168TH STREET, NEW YORK, NEW YORK 10032, USA**USA
JOURNAL: Journal of Virology 64 (10): p4697-4702 1990
ISSN: 0022-538X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: a recombinant baculovirus (AcPVR) carrying cDNA encoding the PVR. Antibodies raised against PVR expressed in **bacteria** immunoprecipitated a 67-kilodalton polypeptide from cytoplasmic extracts of AcPVR-infected cells. **Treatment** of AcPVR-infected cells with **tunicamycin** revealed that the PVR is a glycoprotein containing N-glycosidic linkages and that carbohydrate accounts...

2/3,K/24 (Item 24 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0006819976 BIOSIS NO.: 198988135091
BACTERIAL CHITINASE IS MODIFIED AND SECRETED IN TRANSGENIC TOBACCO
AUTHOR: LUND P (Reprint); LEE R Y; DUNSMUIR P
AUTHOR ADDRESS: DNA PLANT TECHNOL CORP, 6701 SAN PABLO AVENUE, OAKLUND, CALIF 94608, USA**USA
JOURNAL: Plant Physiology (Rockville) 91 (1): p130-135 1989
ISSN: 0032-0889
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: The chiA gene of Serratia marcesens codes for a secreted protein, **bacterial** chitinase (ChiA). We have investigated the modifications and the cellular location of ChiA when it...

...plants. Immunoblots on total leaf protein probed with antibody to ChiA showed that when the **bacterial** chitinase is expressed in plants, it migrates as a series of discrete bands with either the same or a slower mobility than the secreted **bacterial** protein. Analysis of the vacuum infiltrate of leaves expressing ChiA showed that the modified forms...
...however, contained only the nonmodified form. The molecular weight of these polypeptides is reduced by **treatment** with glycopeptidase F but not with endoglycosidase H. **Treatment** of the suspension cultures with **tunicamycin** also leads to reduction in the molecular weight of the chitinase bands. We suggest that...

...expressed in plants, and that the modifications are complex glycans. These results show that a **bacterial** signal sequence can function in plant cells, and that protein secretion from plant cells probably...

2/3,K/25 (Item 25 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0006720389 BIOSIS NO.: 198988035504
CHANGES IN GLYCOSYLATION ALTER THE AFFINITY OF THE HUMAN TRANSFERRIN RECEPTOR FOR ITS LIGAND
AUTHOR: HUNT R C (Reprint); RIEGLER R; DAVIS A A
AUTHOR ADDRESS: DEP MICROBIOL AND IMMUNOL, UNIV SOUTH CAROLINA MED SCH, COLUMBIA, SOUTH CAROLINA 29208, USA**USA
JOURNAL: Journal of Biological Chemistry 264 (16): p9643-9648 1989
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: necessary for ligand binding, purified receptors were isolated from cells grown in the presence of **tunicamycin** . When K562 cells were grown in the presence of **tunicamycin** , and 80-kDa nonglycosylated form of the receptors was synthesized. This nonglycosylated receptor was also ...

...of it reached the cell surface than the fully glycosylated form, although both untreated and **tunicamycin** -grown cells appeared to synthesize transferrin receptors at similar rates. Although the number of receptor molecules/cell was similar in control and **tunicamycin** - **treated** cells, the nonglycosylated receptors exhibited a much lower affinity for transferrin than those of untreated cells; in contrast, when receptors were purified by immunoprecipitation and digested with **bacterial** alkaline phosphatase, no difference was observed between the affinity of these receptors and undigested immunoprecipitated...

2/3,K/26 (Item 26 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0006646121 BIOSIS NO.: 198987094012
LECTIN-MEDIATED CELL-ATTACHMENT AND PHAGOCYTOSIS OF STAPHYLOCOCCUS-SAPROPHYTICUS STRAIN S1
AUTHOR: BEUTH J (Reprint); KO H L; OHSHIMA Y; SCHUMACHER-PERDREAU F; PETERS G; PULVERER G
AUTHOR ADDRESS: HYGIENE-INST, UNIV, GOLDENFELSSTR 19-21, D-5000 KOELN 41** WEST GERMANY
JOURNAL: Zentralblatt fuer Bakteriologie Mikrobiologie und Hygiene Series A 270 (1-2): p22-27 1988
ISSN: 0176-6724
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: is mediated by lectins. Accordingly, microbial lectin blocking with specific glycoconjugates or lectin dysfunction (after **treatment** of **bacteria** with subinhibitory concentrations of **tunicamycin**) significantly decreased staphylococcal adherence to epithelial cells. Chemiluminescence measurements of human polymorphonuclear leukocyte (PMN) function...

2/3,K/27 (Item 27 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

0006138957 BIOSIS NO.: 198885107848
HEMATOPOIETIC GROWTH FACTOR GLYCOSYLATION MULTIPLE FORMS OF CHICKEN MYELOMONOCYTIC GROWTH FACTOR
AUTHOR: LEUTZ A (Reprint); BEUG H; WALTER C; GRAF T
AUTHOR ADDRESS: DEP MICROBIOL, LIFE SCI BUILD, STATE UNIV NEW YORK, STONY BROOK, NY 11794, USA**USA
JOURNAL: Journal of Biological Chemistry 263 (8): p3905-3911 1988
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: The production of chicken myelomonocytic growth factor (cMGF) can be rapidly induced by **bacterial** lipopolysaccharide from the macrophage cell line HD11. Immunoprecipitation analysis of lipopolysaccharide-induced HD11 cells labeled...

...the presence or absence of glycosylation- and oligosaccharide-processing inhibitors, as well as by glycosidase **treatment** of immunoprecipitates. Our results show that the half-time for intracellular processing/secretion is less...
...fraction of cMGF is modified by long chain, chondroitinase-sensitive, sulfated glycans. This modification is **tunicamycin** -sensitive, suggesting that the sulfated glycans are attached to N-linked rather than to O...

2/3,K/28 (Item 28 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0006096902 BIOSIS NO.: 198885065793
CHARACTERISTICS OF ADHERENCE TO PLASTIC TISSUE CULTURE PLATES OF COAGULASE-NEGATIVE STAPHYLOCOCCI EXPOSED TO SUBINHIBITORY CONCENTRATIONS OF ANTIMICROBIAL AGENTS
AUTHOR: SCHADOW K H (Reprint); SIMPSON W A; CHRISTENSEN G D
AUTHOR ADDRESS: VET ADM MED CENT, 1030 JEFFERSON AVE, MEMPHIS, TENN 38104, USA**USA
JOURNAL: Journal of Infectious Diseases 157 (1): p71-77 1988
ISSN: 0022-1899
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: coagulase-negative staphylococci on plastic tissue culture plates were determined after the organisms had been **treated** for up to an additional 6 h with subinhibitory concentrations of antimicrobial agents. Clindamycin, erythromycin, norfloxacin, **tunicamycin** , and vancomycin had no effect. Cephalothin, chloramphenicol, gentamicin, imipenem, methicillin, novobiocin, polymyxin B, rifampin, and...

...increase in adherence of 65% was observed for one strain, RP14 (ATCC 35981), with rifampin **treatment** . Hydrophobicity of coagulase-negative staphylococci **treated** with antimicrobial agents measured by using a biphasic system with hexadecane showed excellent correlation with adherence ($r = .958$, $P < .0005$), a result suggesting that adherence of these **bacteria** in this system depends heavily on hydrophobic surface

moieties. Transmission electron microscopy of drug- **treated** coagulase-negative staphylococci revealed only an increase in cell-wall thickness, regardless of whether adherence...

2/3,K/29 (Item 29 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0006059151 BIOSIS NO.: 198885028042
MODIFICATION OF GLYCOSYLATION BY TUNICAMYCIN TREATMENT INHIBITS LECTIN-MEDIATED ADHESION OF STREPTOCOCCUS-PNEUMONIAE TO VARIOUS TISSUES
AUTHOR: PULVERER G (Reprint); BEUTH J; KO H L; SOELTER J; UHLENBRUCK G
AUTHOR ADDRESS: HYGIENE-INST DER UNIV ZU KOELN, GOLDENFELSSTR 19-21, D-5000 KOELN 41**WEST GERMANY
JOURNAL: Zentralblatt fuer Bakteriologie Mikrobiologie und Hygiene Series A 266 (1-2): p137-144 1987
ISSN: 0176-6724
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: cell surfce glycoconjugates are thought to be involved in recognition events associatad with infectious diseases. **Treatment** of Streptococcus pneumoniae (which exhibits well defined surface lectins) with subinhibitory concentrations of the antibiotic **tunicamycin** was found to block the protein glycosylation of the **bacterial** surfaces. Since **bacterial** lectins (adhesins) are in most cases glycoproteins and play an important role in the organ...
...cell surface carbohydrates is required for a successful completion of the adhesion phase of pathogenic **bacteria** in infectious diseases and for the induction of granulocyte stimulation.

2/3,K/30 (Item 30 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0004678113 BIOSIS NO.: 198579097012
COMPARISON BETWEEN MURINE NATURAL ANTIBODIES AND NATURAL KILLER CELLS RECOGNITION OF SEPARATE TARGET STRUCTURES AS REVEALED BY DIFFERENTIAL IN-VITRO EXPRESSION AND DEPENDENCE ON GLYCOSYLATION
AUTHOR: GRONBERG A (Reprint); ERIKSSON E; SINANGIL F; RONNHOLM M; FEIZI T; MINDEN P; KIESSLING R
AUTHOR ADDRESS: DEP IMMUNOL, KAROLINSKA INST, BOX 60400, S-104 01 STOCKHOLM, SWEDEN**SWEDEN
JOURNAL: Journal of the National Cancer Institute 74 (1): p67-76 1985
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: the variants. NAb could be inhibited by purified C-type virus particles and also by **bacterial** sonicates and various glycoprotein preparations. **Treatment** of target cells with **tunicamycin** , an inhibitor of asparagine-linked glycosylation, decreased the sensitivity to NAb lysis but had no...

2/3,K/31 (Item 31 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0003889343 BIOSIS NO.: 198375073286
FIBRINOGEN MEDIATED ADHERENCE OF GROUP A STREPTOCOCCUS TO INFLUENZA A VIRUS INFECTED CELL CULTURES
AUTHOR: SANFORD B A (Reprint); DAVISON V E; RAMSAY M A
AUTHOR ADDRESS: DEP MICROBIOL, UNIV TEX HEALTH SCI CENT, SAN ANTONIO, TEX 78284, USA**USA
JOURNAL: Infection and Immunity 38 (2): p513-520 1982
ISSN: 0019-9567
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: infected with influenza A virus (strains FM1, Jap 305 and NWS) and reacted with fibrinogen. **Treatment** of virus-infected cell cultures with human fibrinogen significantly enhanced streptococcal adherence (P < 0.0005...

...adherence was not seen with NWS virus-infected cell cultures or with virus-infected cells **treated** with human fibronectin, canine fibrinogen or porcine fibrinogen. Human fibrinogen was shown to bind directly...
...membranes of virus-infected cells. Virus-infected cell cultures were incubated in the presence of **tunicamycin** , an antibiotic that inhibits glycosylation of virus-specific surface membrane glycoproteins. With increasing antibiotic concentration...

...a progressive decrease in fibrinogen-mediated streptococcal adherence. Adherence of 3H-labeled streptococci to fibrinogen- **treated** , virus-infected cell cultures showed saturation kinetics and could be blocked with monospecific antibodies against...

...in vivo, might help explain the observed association between influenza A virus infection and subsequent **bacterial** superinfection with group A Streptococcus.

2/3,K/32 (Item 32 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0003872634 BIOSIS NO.: 198375056577
A SELECTIVE ISOLATION PROCEDURE FOR MICROMONOSPORA
AUTHOR: WAKISAKA Y (Reprint); KAWAMURA Y; YASUDA Y; KOIZUMI K; NISHIMOTO Y
AUTHOR ADDRESS: SHIONOGI RESEARCH LABORATORIES, FUKUSHIMA-KU, OSAKA 553, JPN**JAPAN
JOURNAL: Journal of Antibiotics (Tokyo) 35 (7): p822-836 1982
ISSN: 0021-8820
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: A selective medium containing 25-50 .mu.g/ml of **tunicamycin** was devised to isolate micromonosporae from soil samples, making possible simple, preferential isolation of a variety of Micromonospora. When a large amount of gram-negative **bacteria** was present in a sample, alkaline **treatment** (0.01 N NaOH, 5-10 min at 15.degree. C) was employed to reduce the numbers. Using the **tunicamycin** agar medium, 1585 strains of presumably different micromonosporae were obtained from 400 soil samples collected...

...On the average, 4 different Micromonospora strains could be isolated from 1 soil sample. This **tunicamycin** method made possible a concentrated screening method for new antibiotics from Micromonospora.

2/3,K/33 (Item 33 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0003858759 BIOSIS NO.: 198375042702
FACTORS INFLUENCING ADHERENCE OF STAPHYLOCOCCUS-AUREUS TO INFLUENZA A VIRUS INFECTED CELL CULTURES
AUTHOR: DAVISON V E (Reprint); SANFORD B A
AUTHOR ADDRESS: DEP OF MICROBIOL, THE UNIV OF TEX HEALTH SCI CENTER, SAN ANTONIO, TEX 78284, USA**USA
JOURNAL: Infection and Immunity 37 (3): p946-955 1982
ISSN: 0019-9567
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: as the cell receptors for S. aureus because the growth of virus-inoculated monolayers in **tunicamycin** (an inhibitor of glycosylation) and the pretreatment of virus-infected cells with trypsin or virus-specific antiserum, which inhibit hemadsorption, had no effect on staphylococcal significantly reduced by protease **treatment** of either monolayers or staphylococci and by heat **treatment** of staphylococci. UV irradiation and **treatment** of **bacteria** with 0.1 M EDTA enhanced adherence. Pretreatment of monolayers with a thermal extract of...
...to virus-infected cells ($P < 0.005$) compared with binding with untreated S. aureus. The **treated** **bacteria** also adsorbed virus out of suspension. Evidently, fibrinogen forms a bridge between S. aureus and...

2/3,K/34 (Item 1 from file: 24)
DIALOG(R)File 24:CSA Life Sciences Abstracts

0002406402 IP ACCESSION NO: 5729706
Binding of Extracellular Matrix Molecules by Enterococci

Tyriak, I; Ljungh, S
Department of Microbiology, Institute of Animal Physiology, Slovak Academy of Sciences, Xoltesovej 4-6, 040 01 Kowice, Slovakia

Current Microbiology, v 46, n 6, p 435-442, June 2003
PUBLICATION DATE: 2003

PUBLISHER: Springer-Verlag, Life Science Journals

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
ISSN: 0343-8651
FILE SEGMENT: Bacteriology Abstracts (Microbiology B)

ABSTRACT:
The **bacterial** surfaces of enterococci are not uniform. This fact is

confirmed by several studies and by...

...of eight selected strains tested in microtiter plates and by PAA. Moreover, the influence of **tunicamycin treatment** was different because significant (P < 0.001) blocking effect of **tunicamycin** was observed with two selected strains (HJ 26 and HJ 36), whereas two strains (HJ 18 and HJ 22) were not significantly affected in their fetuin binding. The **treatment** of six enterococcal strains with proteolytic enzymes, pronase P, and trypsin, and with sodium metaperiodate...

2/3,K/35 (Item 2 from file: 24)
DIALOG(R)File 24:CSA Life Sciences Abstracts

0001461581 IP ACCESSION NO: 3703488
Effects of tunicamycin on the pH-activity pattern of acid phosphatase in Pseudomonas pseudomallei

Kondo, E; Wangroongsaub, P; Kanai, K
Natl. Inst. Health, Dep. Med. Sci., 88/7 Soi Bamrasnaradura Hosp., Tivanond Rd., Nonthaburi 11000, Thailand

Southeast Asian Journal of Tropical Medicine & Public Health, v 25, n 1, p 144-151, 1994
ADDL. SOURCE INFO: Southeast Asian Journal of Tropical Medicine & Public Health [SOUTHEAST ASIAN J. TROP. MED. PUBLIC HEALTH], vol. 25, no. 1, pp. 144-151, 1994
PUBLICATION DATE: 1994

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
ISSN: 0038-3619
FILE SEGMENT: Industrial & Applied Microbiology Abstracts (Microbiology A)
ABSTRACT:
... the higher pH range with the growth of culture. The culture in the presence of **tunicamycin** (20 mu g/ml) showed a decreased activity selectively in the higher pH range, while the activity in the lower pH was more heat-labile. The **bacterial** cells grown on agar plates containing **tunicamycin** were more heat-labile than the untreated control cells. The glucosidase- **treatment** reduced the enzymatic activity (of the phosphatase-active fractions from the living cells) with the...

2/3,K/36 (Item 3 from file: 24)
DIALOG(R)File 24:CSA Life Sciences Abstracts

0001370070 IP ACCESSION NO: 3583135
Identification of an infectious laryngotracheitis virus gene encoding an immunogenic protein with a predicted M sub(r) of 32 kilodaltons

Kongsuwan, K; Johnson, MA; Prideaux, CT; Sheppard, M
CSIRO Div. Anim. Health, Anim. Health Res. Lab., Private Bag 1, Parkville, Vic. 3052, Australia

Virus Research, v 29, n 2, p 125-140, 1993
ADDL. SOURCE INFO: Virus Research [VIRUS RES.], vol. 29, no. 2, pp.

125-140, 1993
PUBLICATION DATE: 1993

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
ISSN: 0168-1702
FILE SEGMENT: Virology & AIDS Abstracts; Genetics Abstracts

ABSTRACT:
... simplex virus type 2 (HSV-2) and equine herpesvirus type 4 (EHV-4). High level **bacterial** production of the p32 protein was achieved by cloning the p32 open reading frame into...

...amount of p32 protein in the medium of ILTV-infected cells in Western blotting. Moreover **tunicamycin treatment** of cells infected with the virus indicated that p32 was glycosylated. This allows us to...

2/3,K/37 (Item 1 from file: 71)
DIALOG(R)File 71:ELSEVIER BIOBASE

02406148 2003189853
Binding of extracellular matrix molecules by enterococci
S(caron)tyriak I.; Ljungh A.
ADDRESS: I. S(caron)tyriak, Department of Microbiology, Institute of Animal Physiology, Slovak Academy of Sciences, S(caron)oltesovej 4-6, 040 01 Kos(caron)ice, Slovakia
EMAIL: styriak@saske.sk
Journal: Current Microbiology, 46/6 (435-442), 2003, United States
CODEN: CUMID
ISSN: 0343-8651
DOCUMENT TYPE: Article
LANGUAGES: English SUMMARY LANGUAGES: English
NO. OF REFERENCES: 37

The **bacterial** surfaces of enterococci are not uniform. This fact is confirmed by several studies and by...

...of eight selected strains tested in microtiter plates and by PAA. Moreover, the influence of **tunicamycin treatment** was different because significant ($P < 0.001$) blocking effect of **tunicamycin** was observed with two selected strains (HJ 26 and HJ 36), whereas two strains (HJ 18 and HJ 22) were not significantly affected in their fetuin binding. The **treatment** of six enterococcal strains with proteolytic enzymes, pronase P, and trypsin, and with sodium metaperiodate...

2/3,K/38 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

00473984 JICST ACCESSION NUMBER: 87A0439727 FILE SEGMENT: JICST-E
Stimulating effects of extracellular matrix substance produced by gastric carcinoma cells on attachment and growth of fibroblasts in vitro.
AKAO SEIGOU (1); SOBUE MITSUKO (1); NIWA MARI (1); NAKASHIMA NOBUO (1); TAKEUCHI JUN (1)
(1) Nagoyadai I

Connect Tissue, 1987, VOL.19,NO.1, PAGE.13-23, FIG.6, REF.27
JOURNAL NUMBER: G0168BAG ISSN NO: 0916-572X
UNIVERSAL DECIMAL CLASSIFICATION: 577.1:576.4 616-006-09
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

...ABSTRACT: vitro. When the carcinoma cells became confluent, they were removed from the culture dishes by **treating** with EDTA, and then fibroblasts were seeded on the remaining extracellular matrix substance on the...

...These effects of the matrix substance produced by KATO-III cells were largely abolished by **treatment** with pronase or trypsin, but not with **bacterial** collagenase or chondroitinase ABC. Preincubation of the matrix substance at 70.DEG.C for 5min...

...matrix substance produced by KATO-III cells in serum-free medium in the presence of **tunicamycin** exhibited only one eighth the activity. The present results seem to indicate that signet ring...

2/3,K/39 (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.

0333459 DBR Accession No.: 2004-05751 PATENT
New fusion protein comprising a transferrin protein exhibiting reduced glycosylation fused to at least one antibody variable region, useful for preparing a composition for treating e.g., septic shock, neoplasm or autoimmune disease - transferrin or lactoferrin recombinant fusion protein expression in transgenic animal milk or serum for use in therapy
AUTHOR: SADEGHI H; PRIOR C P; TURNER A
PATENT ASSIGNEE: BIOREXIS PHARM CORP 2003
PATENT NUMBER: US 20030226155 PATENT DATE: 20031204 WPI ACCESSION NO.: 2004-022093 (200402)
PRIORITY APPLIC. NO.: US 384060 APPLIC. DATE: 20030310
NATIONAL APPLIC. NO.: US 384060 APPLIC. DATE: 20030310
LANGUAGE: English

...ABSTRACT: acid; (6) a method of producing a transferrin fusion protein; and (7) a method of **treating** a disease or disease symptom in a patient. BIOTECHNOLOGY - Preferred Protein: The fusion protein comprises...

... Arg124, Ala126, Gly127, Thr452, Arg456, Ala458 or Gly459. It is expressed in the presence of **tunicamycin** . It comprises a portion of the N domain of the transferrin protein, a bridging peptide...

... Expressing transferrin fusion protein comprises culturing the host cell for expression of the fusion protein. **Treating** a disease or disease symptom in a patient comprises administering the fusion protein. The disease comprises septic shock, endotoxic shock, cachexia syndromes associated with **bacterial** , viral or parasitic infections, neoplasm, autoimmune disease, arthritis or adverse effects associated with **treatment** for preventing graft rejection. Production (claimed): Producing a transferrin fusion protein comprises isolating the fusion ...

... OF ACTION - Gene therapy. USE - The fusion protein is useful for preparing a composition for **treating** a disease or disease symptom in a patient e.g., septic shock, endotoxic shock, cachexia syndromes associated with **bacterial** , viral or parasitic infections, neoplasm, autoimmune disease, arthritis or adverse effects associated with **treatment** for preventing graft rejection (claimed). EXAMPLE - No relevant examples given. (9 pages)

2/3,K/40 (Item 2 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.

0079290 DBR Accession No.: 88-10139
Some characteristics of a hypersensitive mutant to beta-lactam antibiotics derived from a strain of Stpahylococcus aureus - useful for screening of beta-lactam antibiotics
AUTHOR: Kamagashira T
CORPORATE AFFILIATE: Otsuka-Pharm.
CORPORATE SOURCE: Laboratories of Fermentation Research, Otsuka Pharmaceutical Co., Ltd., Kawauchi-cho, Tokushima 771-01, Japan.
JOURNAL: Agric.Biol.Chem. (52, 7, 1841-43) 1988
CODEN: ABCHA6
LANGUAGE: English

...ABSTRACT: to isolate a strain particularly susceptible to beta-lactam antibiotics, Staphylococcus aureus Newman cells were **treated** with 100 ug/ml N-methyl- N'-nitro- N-nitrosoguanidine in 0.05 M Tris...

... in paper disk assays, 51 carbapenem, 3 cephamycin C, 5 adicillin, 5 fosfomycin and 8 **tunicamycin** -producing strains were found among 10,000 strains of actinomycetes and 1000 strains of **bacteria** . The mutant's use in screening tests should result in the discovery of other new...

2/3,K/41 (Item 1 from file: 370)
DIALOG(R)File 370:Science

00500410 (USE 9 FOR FULLTEXT)
Stress-Induced Phosphorylation and Activation of the Transcription Factor CHOP (GADD153) by p38 MAP Kinase
Wang, XiaoZhong; Ron, David
Departments of Medicine and Cell Biology, Skirball Institute of Biomolecular Medicine, and the Kaplan Cancer Center, New York University Medical Center, New York, NY 10016, USA.
Science Vol. 272 5266 pp. 1347
Publication Date: 5-31-1996 (960531) Publication Year: 1996
Document Type: Journal ISSN: 0036-8075
Language: English
Section Heading: Reports
Word Count: 2164

(THIS IS THE FULLTEXT)

...Text: include many that induce transcription of CHOP. p38 purified from stressed COS-1 cells phosphorylated **bacterially** expressed CHOP in vitro. Mutant CHOP, bearing the Ala.sup(78,81) substitution, was not...

effects of the stress-induced modification of the dimerization partners of CHOP is avoided. MMS **treatment** or overexpression of p38 markedly activated a reporter gene driven by Gal4 binding sites only...

...in a medium with a low concentration of glucose [(Glu), 2 mM, 16 hours] or **treated** with **tunicamycin** (25 (mu) g/ml, 4 hours). CHOP, detected by protein immunoblotting with the 9C8 monoclonal...

...32)P]orthophosphate-labeled NIH 3T3 cells (500 (mu) Ci/ml, 5 hours) that were **treated** with the stress-inducing alkylating agent MMS (100 (mu) g/ml, 3 hours) were immunoprecipitated...

...antiserum to CHOP (bottom) are shown. (C) Wild-type (WT) and mutant CHOP, immunoprecipitated from **treated** or untreated NIH 3T3 cells with the antibody to 9E10 (B17) , were digested with trypsin...

...The arrows mark the position of the two peptides that underwent inducible phosphorylation upon MMS **treatment** . The peptide marked "X" was constitutively phosphorylated. The predicted sequence of the tryptic phosphopeptides, with...

...phosphorylation of wild-type and Ala substitution mutants of CHOP from untreated cells and cells **treated** with MMS. Autoradiography (top) and CHOP immunoblot (bottom) are shown. (E) Schematic diagram of the...
...Figure F2
Caption: Phosphorylation of CHOP by p38 MAP kinase. (A) Tryptic phosphopeptide maps of **bacterially** expressed CHOP phosphorylated in vitro with purified MAP kinases. Tagged forms of p38 (B13) , SAPK...

...expressed in COS-1 cells. Activated kinases, purified by the tag, were used to phosphorylate **bacterially** expressed wild-type or Ala.sup(78,81) CHOP with [(gamma) -.sup(32)P]ATP...as in Fig. 1B. The indicated concentration of SB203580 was added 30 min before MMS **treatment** . SB203580 inhibits MMS-induced phosphorylation of CHOP in a dose-dependent manner (top, autoradiogram) with...

...activity of SAPK-1s is increased (bottom). (C) Tryptic phosphopeptide mapping of CHOP from cells **treated** with MMS in the absence or presence of SB203580 (10 (mu) M) shows that inhibition...

...per plate), and kinase expression vector (5 ng per plate). Where indicated, the cells were **treated** with MMS (100 (mu) g/ml) for 1.5 hours, 12 hours before harvest for...

2/3,K/42 (Item 1 from file: 50)
DIALOG(R)File 50:CAB Abstracts

0008098235 CAB Accession Number: 20013073910
Inhibitors of N-linked glycosylation induce systemic acquired resistance in cucumber.
Sticher, L.; Metraux, J. P.
Departement de Biologie, Unite Biologie vegetale, Universite de Fribourg, 3 rte A. Gockel, CH-1700 Fribourg, Switzerland.
Physiological and Molecular Plant Pathology vol. 56 (6): p.245-252
Publication Year: 2000
ISSN: 0885-5765
Digital Object Identifier: 10.1006/pmpp.2000.0271
Publisher: Academic Press London, UK

Language: English Record Type: Abstract
Document Type: Journal article

... were injected with water suspension containing Pseudomonas syringae pv. lachrymans (2 x 10 SUP 8 **bacteria** /ml) or N-glycosylation inhibitors (**tunicamycin** , at 0, 1, 10 or 100 microM; or amphomycin); and the first leaf from the same plants was **treated** with spore suspension of Colletotrichum lagenarium [Colletotrichum orbiculare] (20 x 5 microlitre at 200 000...
... C. lagenarum was observed and free and bound salicylic acid (from the first leaf) and **tunicamycin** analysis was performed. Maximum resistance of the plants to C. lagenarium (as early as 2 days after **treatment**), and salicylic acid accumulation and expression of chitinase and a PR1-like protein, were recorded from 100 microM **tunicamycin** . N-glycosylation was inhibited after 2 h of **tunicamycin** application. There was a large decrease in the labelling of the small (16 kDa) and...

... bisphosphate carboxylase/oxygenase, and the expression of the protein BiP was increased in cotyledons after **treatment** with **tunicamycin** and P. syringae pv. lachrymans .

2/3,K/43 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

01292576 ORDER NO: AAD93-15032
COMPLEX PATHWAYS OF PROTEIN TARGETING IN THE ENDOMEMBRANE SYSTEM OF PLANTS
Author: BERGEY, DANIEL ROBERT
Degree: PH.D.
Year: 1992
Corporate Source/Institution: TEXAS A&M UNIVERSITY (0803)
Source: VOLUME 54/01-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 74. 114 PAGES

...peptide derived from the cell wall protein extensin is sufficient to mediate translocation of the **bacterial** protein beta-glucuronidase (GUS) across the endoplasmic reticulum and into the plant endomembrane system. GUS activity is negligible in transformed plants, but increases dramatically after **treatment** with **tunicamycin** --an N-linked glycosylation inhibitor. Secretion of GUS is unaffected by protein glycosylation and **tunicamycin** -induced inhibition of glycosylation. Subcellular fractionation analysis corroborated our immunolocalization results, which revealed GUS in...

2/3,K/44 (Item 2 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

788114 ORDER NO: AAD82-16027
ADHERENCE OF STAPHYLOCOCCUS AUREUS TO UNINFECTED AND INFLUENZA A VIRUS-INFECTED MAMMALIAN CELLS: AN IN VITRO CELL CULTURE MODEL OF BACTERIAL SUPERINFECTION
Author: DAVISON, VEE E.
Degree: PH.D.
Year: 1982
Corporate Source/Institution: THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO (0853)
Source: VOLUME 43/04-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

Bacterial superinfections cause excessive mortality after influenza outbreaks. To test the hypothesis that virus infection promotes **bacterial** adherence (BAd) to the infected cells, mammalian cells were infected with influenza A viruses, exposed to 34 strains of **bacterial** respiratory pathogens, then examined for enhanced BAd to infected cells. BAd was affected by virus subtype, host cell type, and **bacterial** strain. A quantitative radioassay was developed to study staphylococcal adherence. Attachment of {('3)H}S...
...charge, and cell density. Viral H and N were not receptors for S. aureus because **treating** infected cells with trypsin, or with virus-specific antiserum (which inhibits HAd), or growing infected cells with **tunicamycin** (glycosylation inhibitor) did not affect staphylococcal adherence. Protease **treatment** of monolayers or staphylococci, and detergent or heat **treatment** of staphylococci reduced BAd to uninfected and infected cells significantly. UV-irradiation and **treatment** of the **bacteria** with EDTA enhanced BAd.
There is a minimum of two receptors for adherence on the...

2/3,K/45 (Item 1 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)

01057494 SUPPLIER NUMBER: 02679374 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Tunicamycin enhances the antiviral and anticellular activity of interferon.
Maheshwari, Radha K.; Sreevalsan, T.; Silverman, Robert H.; Hay, John; Friedman, Robert M.
Science, v219, p1340(3)
March 18,
1983
PUBLICATION FORMAT: Magazine/Journal ISSN: 0036-8075 LANGUAGE: English
RECORD TYPE: Fulltext TARGET AUDIENCE: Academic
WORD COUNT: 1669 LINE COUNT: 00182

... on cell membranes and the antiviral and antigrowth activities of interferons remains to be established.
Tunicamycin , a glucosamine-containing antibiotic (21) produced by Streptomyces lysosuperficus, inhibits lipid biosynthesis by blocking the...

...from uridine diphosphate N-acetylglucosamine to dolichylmonophosphate (22). Many important biochemical functions are inhibited by **tunicamycin** , such as glycoprotein synthesis in yeast (23); the **bacterial** synthesis of polyisoprenol sugars (24), peptidoglycans (25), procollagen (26), and polymeric cell walls (27); cell...
...28); secretion of immunoglobulins A and E by plasma cells (29); and virus multiplication (30). **Tunicamycin** also has profound effects on the morphology and surface properties of prokaryotes and eukaryotes and causes changes in membrane organization (31). We have reported (32, 33) that **treatment** of L(B) cells with interferon or **tunicamycin** reduces the production of infectious versicular stomatitis virus (VSV) particles, decreases the amount of glycoprotein and membrane protein in VSV released from **treated** cells, and inhibits an early step in the formation of asparagine-linked oligosaccharide chains, that is, the incorporation by membrane preparations from **treated** cells of N-acetylglucosamine into glycolipids with the properties of dolichol derivatives.
The cell surface...

2/3,K/46 (Item 1 from file: 159)
DIALOG(R)File 159:Cancerlit

02323644 PMID: 97608624
Identification of tumor antigens with vaccine potential using antibody phage display (Meeting abstract).
Herlyn; Pereira; Maruyama; Jacob; Van Belle P; Sivanandham; Wallack; Elder; Siegel
The Wistar Inst., Philadelphia, PA 19104
Proc Annu Meet Am Assoc Cancer Res 1996, 37, ISSN 0197-016X
Document Type: MEETING ABSTRACTS
Languages: ENGLISH
Main Citation Owner: NOTNLM
Record type: Completed

... direct isolation of the corresponding antigen, without the need for antibody production and purification using **bacteria** or eukaryotic cell systems. This approach was used to identify melanoma-associated cell surface antigens...

... 8) phages was absorbed to normal melanocytes, followed by phage binding to and elution from **tunicamycin - treated** melanoma cells to obtain Fab directed against protein antigens. These procedures resulted in a greater ...
?

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            157  S3
             42  S4
      S6     42  S3 AND S4
? show files;ds;t/3,k/all
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Set	Items	Description
S1	196	TUNICAMYCIN (S) TREAT? (S) BACTERIA?
S2	46	RD (unique items)
S3	157	TUNICAMYCIN (S) INFLAMMAT?
S4	42	RD (unique items)
S5	46	S1 AND S2
S6	42	S3 AND S4

>>>KWIC option is not available in file(s): 399

6/3,K/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0015876120 BIOSIS NO.: 200600221515
Role of glycosylation in the organic anion transporter OAT1
AUTHOR: Tanaka Kunihiko; Xu Wen; Zhou Fanfan; You Guofeng (Reprint)
AUTHOR ADDRESS: Rutgers State Univ, Dept Pharmaceut, 160 Frelinhuysen Rd, Piscataway, NJ 08854 USA**USA
AUTHOR E-MAIL ADDRESS: gyou@cop.rutgers.edu
JOURNAL: Journal of Biological Chemistry 279 (15): p14961-14966 APR 9 2004 2004
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: disposition of clinically important anionic drugs, including antiviral drugs, antitumor drugs, antibiotics, antihypertensives, and anti- **inflammatories** . We reported previously (Kuze, K., Graves, P., Leahy, A., Wilson, P., Stuhlmann, H., and You, G. (1999) J. Biol. Chem. 274, 1519-1524) that **tunicamycin** , an inhibitor of asparagine-linked glycosylation, significantly inhibited organic anion transport in COS-7 cells...

6/3,K/2 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

0015864703 BIOSIS NO.: 200600210098
Endogenous MD-2 glycocomplex resides in the endoplasmic reticulum of intestinal epithelial cells and is differentially regulated in active inflammatory bowel disease
AUTHOR: Cario Elke; Gerken Guido; Podolsky Daniel K
JOURNAL: Gastroenterology 128 (4, Suppl. 2): pA215 APR 2005 2005
CONFERENCE/MEETING: Annual Meeting of the American-Gastroenterological-Association/Digestive-Disease-Week Chicago, IL, USA May 14 -19, 2005; 20050514
SPONSOR: Amer Gastroenterol Assoc
ISSN: 0016-5085
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: Toll-like receptor (TLR) 4 at the apical pole which is significantly upregulated in active **inflammatory** bowel disease (BD). MD-2 is an essential accessory glycoprotein required for lipopolysaccharide (LPS) recognition...

...and BIP/Grp78, but only minimally with LAMP-1 (lysosomes) and not with GM130 (Golgi). **Tunicamycin** which inhibits N-glycosylation of ER proteins prevented LPS-induced cJun phosphorylation, suggesting that glycosylation...

...epithelial MD-2 expression was also significantly increased in non-involved, mucosal areas close to **inflammation** , but lacking in areas of severe **inflammation** . CONCLUSIONS: The present study suggests that endogenously expressed human MD-2 is retained in the...

...responses to lumenal LPS in IEC via the upregulated TLR4/MD-2 complex in acute **inflammation** .

6/3,K/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0015740685 BIOSIS NO.: 200600086080
Induction of claudin-4 and other tight junction related proteins by NSAIDS in cultured gastric cells
AUTHOR: Mima Shinji; Mizushima Tohru
JOURNAL: Gastroenterology 126 (4, Suppl. 2): pA613 APR 2004 2004
CONFERENCE/MEETING: Digestive Disease Week/105th Annual Meeting of the American-Gastroenterological-Association New Orleans, LA, USA May 16 -20, 2004; 20040516
SPONSOR: Amer Gastroenterol Assoc
ISSN: 0016-5085
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Background & Aims In addition to the anti- **inflammatory** action, non-steroidal anti- **inflammatory** drugs (NSAIDs) have other various positive and negative actions. Epidemiological studies have shown that prolonged...

...PPAR-alpha. We recently found that NSAIDs induce endoplasmic reticulum (ER) stress response. Thapsigargin and **tunicamycin** (inducers of ER stress response) also induced the expression of caludin-4. Conclusions. Results suggest...

6/3,K/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0015327302 BIOSIS NO.: 200510021802
Molecular characterization of N-acylethanolamine-hydrolyzing acid amidase, a novel member of the choloylglycine hydrolase family with structural and functional similarity to acid ceramidase
AUTHOR: Tsuboi Kazuhito; Sun Yong-Xin; Okamoto Yasuo; Araki Nobukazu; Tonai Takeharu; Ueda Natsuo (Reprint)
AUTHOR ADDRESS: Kagawa Univ, Sch Med, Dept Biochem, 1750-1 Ikenobe, Miki, Kagawa 7610793, Japan**Japan
AUTHOR E-MAIL ADDRESS: nueda@med.kagawa-u.ac.jp
JOURNAL: Journal of Biological Chemistry 280 (12): p11082-11092 MAR 25 05 2005
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Bioactive N-acylethanolamines, including anandamide (an endocannabinoid) and N-palmitoylethanolamine (an anti- **inflammatory** and neuroprotective substance), are hydrolyzed to fatty acids and ethanolamine by fatty acid amide hydrolase...
...NAAA, and N-lauroylethanolamine hydrolyzing activity was observed with acid ceramidase. By the use of **tunicamycin** and endoglycosidase, NAAA was found to be a glycoprotein. Furthermore, the enzyme was proteolytically processed...

6/3,K/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014774925 BIOSIS NO.: 200400155682
Endoplasmic reticulum stress due to altered cellular redox status positively regulates murine hepatic CYP2A5 expression.
AUTHOR: Gilmore W James; Kirby Gordon M (Reprint)
AUTHOR ADDRESS: Department of Biomedical Sciences, University of Guelph, Guelph, ON, N1G 2W1, Canada**Canada
AUTHOR E-MAIL ADDRESS: gkirby@uoguelph.ca
JOURNAL: Journal of Pharmacology and Experimental Therapeutics 308 (2): p 600-608 February 2004 2004
MEDIUM: print
ISSN: 0022-3565 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: 2A5 (CYP2A5) is uniquely induced by a variety of agents that cause liver injury and **inflammation** , conditions that are typically associated with down-regulation of P450s. We hypothesized that induction of...

...biomarker glucose-regulated protein (GRP) 78. Treatment of primary hepatocytes with ER stress activators thapsigargin, **tunicamycin** , and trans-4,5-dihydroxy-1,2-dithiane (DTTox) and the calcium ionophore A23187 (calcimycin...

6/3,K/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014694743 BIOSIS NO.: 200400065500
Endoplasmic reticulum stress induces hyaluronan deposition and leukocyte adhesion.
AUTHOR: Majors Alana K (Reprint); Austin Richard C; de la Motte Carol A; Pyeritz Reed E; Hascall Vincent C; Kessler Sean P; Sen Ganes; Strong Scott A
AUTHOR ADDRESS: Dept. of Immunology, Cleveland Clinic Foundation, 9500 Euclid Ave., NB30, Cleveland, OH, 44195, USA**USA
AUTHOR E-MAIL ADDRESS: majorsa@ccf.org
JOURNAL: Journal of Biological Chemistry 278 (47): p47223-47231 November 21, 2003 2003
MEDIUM: print
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: smooth muscle cells bind few leukocytes, but treatment with compounds that induce ER stress, including **tunicamycin** , A23187, and thapsigargin, promotes leukocyte binding. Likewise, dextran sulfate, another agent capable of inducing ER stress and promoting **inflammation** in vivo, strongly induces leukocyte adhesion. The bound leukocytes are released by hyaluronidase treatment, indicating...

...and hyaluronan deposition in vivo. These results indicate that ER stress may contribute to chronic **inflammation** by forming a hyaluronan-rich extracellular matrix that is conducive to leukocyte binding.

6/3,K/7 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014660991 BIOSIS NO.: 200400031748
ENDOPLASMIC RETICULUM STRESS IN MUCOSAL SMOOTH MUSCLE CELLS UPREGULATES HYALURONAN DEPOSITION AND LEUKOCYTE ADHESION.
AUTHOR: Majors Alana K (Reprint); Austin Richard C; de Motte Carol A la; Pyeritz Reed E; Strong Scott A
AUTHOR ADDRESS: Cleveland, OH, USA**USA
JOURNAL: Digestive Disease Week Abstracts and Itinerary Planner 2003 p Abstract No. T1165 2003 2003
MEDIUM: e-file
CONFERENCE/MEETING: Digestive Disease 2003 FL, Orlando, USA May 17-22, 2003; 20030517
SPONSOR: American Association for the Study of Liver Diseases
American Gastroenterological Association
American Society for Gastrointestinal Endoscopy
Society for Surgery of the Alimentary Tract
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Endoplasmic reticulum (ER) stress is associated with **inflammation** , but the relationship between ER stress and **inflammatory** diseases is not known. We have previously shown that the **inflammation** typical of Crohn's disease and ulcerative colitis is associated with enhanced deposition of hyaluronan...

...demonstrated little accumulation of HA in untreated cultures. In contrast, M-SMC cultures treated with **tunicamycin** , an agent that strongly induces ER stress by interfering with glycosylation, demonstrated a matrix rich...

...deposition of HA. Likewise, dextran sulfate, another agent that induces ER stress, and promotes intestinal **inflammation** in vivo, dramatically induced HA deposition. Leukocyte adhesion assays employing radiolabeled U937 cells or peripheral...

...unique form of hyaluronan and suggests that ER stress may contribute to the pathogenesis of **inflammatory** bowel disease by altering the extracellular matrix and its capacity to interact with leukocytes..

6/3,K/8 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014555464 BIOSIS NO.: 200300510827
The mutation Ser511Asn leads to N-glycosylation and increases the cleavage of high molecular weight kininogen in rats genetically susceptible to inflammation.
AUTHOR: Isordia-Salas Irma; Pixley Robin A; Parekh Hemant; Kunapuli Satya P ; Li Fengling; Stadnicki Anthony; Lin Yingzhang; Sartor R Balfour; Colman Robert W (Reprint)
AUTHOR ADDRESS: The Sol Sherry Thrombosis Research Center, Temple University School of Medicine, 3400 North Broad St, Philadelphia, PA, 19140, USA**USA
AUTHOR E-MAIL ADDRESS: robert.colman@temple.edu
JOURNAL: Blood 102 (8): p2835-2842 October 15, 2003 2003
MEDIUM: print
ISSN: 0006-4971
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Crohn disease is immunologically mediated and characterized by intestinal and systemic chronic **inflammation** . In a rat model, injection of peptidoglycan-polysaccharide complexes into the intestinal wall induced chronic **inflammation** in Lewis but neither Fischer nor Buffalo rats, indicating a differential genetic susceptibility. Proteolysis of...

...after treatment with N-glycosidase F. When CHO cells were cultured in the presence of **tunicamycin** , the kallikrein-induced cleavage rate of Lewis HK was not increased. This molecular alteration might be one contributing factor resulting in chronic **inflammation** in Lewis rats.

6/3,K/9 (Item 9 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014550418 BIOSIS NO.: 200300505446
Observation by electron microscopy on recombinant soluble human complement receptor type 1 (sCR1) and its derivative, aglyco-sCR1, from CHO cells.
AUTHOR: Ishii Noriyuki (Reprint); Kato Hisamune; Wang Pi-Chao
AUTHOR ADDRESS: Biological Information Research Center, National Institute of Advanced Industrial Science and Technology, 1-1-1 Higashi, Central-6, Tsukuba, Ibaraki, 305-8566, Japan**Japan
AUTHOR E-MAIL ADDRESS: ishii@ni.aist.go.jp
JOURNAL: Enzyme and Microbial Technology 33 (4): p482-487 10 September, 2003 2003
MEDIUM: print
ISSN: 0141-0229
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: receptor type 1 (CR1, C3b/C4b receptor) has attracted keen interests as an inhibitor for **inflammatory** and immune system. Recently CR1 was demonstrated to suppress the hyper-acute rejection in xeno...

...study, we purified the derivative of sCR1, called as aglyco-sCR1, by treating sCR1 with **tunicamycin** so as to remove glyco-chains or to inhibit the glycosylation on CR1 protein during...

6/3,K/10 (Item 10 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0012845308 BIOSIS NO.: 200100017147
Biochemical characterization of CD39L4
AUTHOR: Mulero Julio J; Yeung George; Nelken Sarah T; Bright Jessica M; McGowan Daniel W; Ford John E (Reprint)
AUTHOR ADDRESS: Hyseq Inc., 670 Almanor Ave., Sunnyvale, CA, 94086, USA** USA
JOURNAL: Biochemistry 39 (42): p12924-12928 October 24, 2000 2000
MEDIUM: print
ISSN: 0006-2960
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Nucleotides are involved in regulating a number of important processes ranging from **inflammation** to platelet aggregation. Enzymes that can modulate levels of nucleotides in the blood therefore represent ...

...comparing the molecular masses before and after glycosidase treatment. Activity measurements of CD39L4 isolated from **tunicamycin** -treated, transiently transfected COS-7 cells indicate that glycosylation is not required for full ADPase...

6/3,K/11 (Item 11 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0012250511 BIOSIS NO.: 199900510171
Inflammatory cytokine regulation of Fas-mediated apoptosis in thyroid

follicular cells
AUTHOR: Bretz James D; Arscott Patricia L; Myc Andrzej; Baker James R Jr (Reprint)
AUTHOR ADDRESS: University of Michigan Medical Center, 9220 MSRB III, 1150 West Medical Center Dr., Ann Arbor, MI, 48109-0648, USA**USA
JOURNAL: Journal of Biological Chemistry 274 (36): p25433-25438 Sept. 3, 1999 1999
MEDIUM: print
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: We determined that susceptibility to Fas-activated apoptosis could be influenced by certain combinations of **inflammatory** cytokines. Although no single cytokine was effective, pretreatment of thyroid cells with the combination of...

...mediated apoptosis. Susceptibility to Fas-induced death correlated with an increase in expression of a **tunicamycin** -inhibitable high molecular weight form of Fas but not with aggregate expression of Fas.

6/3,K/12 (Item 12 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0011826618 BIOSIS NO.: 199900086278
Heterologous expression and functional characterization of a mouse renal organic anion transporter in mammalian cells
AUTHOR: Kuze Kogo; Graves Peter; Leahy Amy; Wilson Patricia; Stuhlmann Heidi; You Guofeng (Reprint)
AUTHOR ADDRESS: P.O. Box 1243, Dep. Med., Mount Sinai Sch. Med., One Gustave L. Levy Place, New York, NY 10029, USA**USA
JOURNAL: Journal of Biological Chemistry 274 (3): p1519-1524 Jan. 15, 1999 1999
MEDIUM: print
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: a wide range of organic anions including vitamins, antihypertensive drugs, anti-tumor drugs, and anti- **inflammatory** drugs. **Tunicamycin** , an inhibitor of asparagine-linked glycosylation, significantly inhibited the transport activity. Immunofluorescence provided evidence that most of the protein remained in the intracellular compartment in **tunicamycin** -treated cells. Diethyl pyrocarbonate (DEPC), a histidine residue-specific reagent, completely blocked PAH transport. The...

6/3,K/13 (Item 13 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0010120306 BIOSIS NO.: 199698588139
Glycosylated and unglycosylated human lactoferrins both bind iron and show identical affinities towards human lysozyme and bacterial lipopolysaccharide, but differ in their susceptibilities towards tryptic

proteolysis
AUTHOR: Van Berkel Patrick H C; Geerts Marlieke E J; Van Veen Harry A; Kooiman Patricia M; Pieper Frank R; De Boer Herman A; Nuijens Jan H (Reprint)
AUTHOR ADDRESS: Gene Pharming Europe BV, Niels Bohrweg 11-13, 2333 CA Leiden, Netherlands**Netherlands
JOURNAL: Biochemical Journal 312 (1): p107-114 1995 1995
ISSN: 0264-6021
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: human lactoferrin (hLF) with respect to properties that are relevant to its antibacterial and anti- **inflammatory** activities. A human kidney-derived 293(S) cell line that constitutively expresses recombinant hLF (rhLF...
...towards various antibodies of rhLF that had been expressed in the absence or presence of **tunicamycin** (which blocks N-linked glycosylation) did not differ from that of natural (human milk-derived...

...sequence for rhLF and natural hLF. SDS/PAGE of rhLF expressed in the presence of **tunicamycin** revealed a protein with the same M, as that of enzymically deglycosylated natural hLF. Both...

...the C-lobe. Thus our results provide no argument for differential antibacterial and/or anti- **inflammatory** activity of natural and (glycosylated) rhLF and suggest that a major function of glycosylation in ...

6/3,K/14 (Item 14 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0009904568 BIOSIS NO.: 199598372401
A novel signal transduction pathway for the endoplasmic reticulum to the nucleus is mediated by transcription factor NF-kappa-B
AUTHOR: Pahl Heike L (Reprint); Baeuerle Patrick A
AUTHOR ADDRESS: Inst. Biochem., Albert Ludwigs Univ., Hermann Herder Str. 7, D-79104 Freiburg, Germany**Germany
JOURNAL: EMBO (European Molecular Biology Organization) Journal 14 (11): p 2580-2588 1995 1995
ISSN: 0261-4189
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: eukaryotic transcription factor NF-kappa-B is activated by a variety of external stimuli including **inflammatory** cytokines, viral and bacterial infection and UV irradiation. Here we show that internal stress, caused...

...and by treatment of cells with several agents known to cause ER stress, such as **tunicamycin** , brefeldin A, 2-deoxyglucose and thapsigargin. The transcription factor AP-1 was weakly induced under...

6/3,K/15 (Item 15 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0009470007 BIOSIS NO.: 199497491292
Direct contact between T lymphocytes and monocytes is a major pathway for induction of metalloproteinase expression
AUTHOR: Lacraz Sylvie; Isler Patrick; Vey Elizabeth; Welgus Howard G; Dayer Jean-Michel (Reprint)
AUTHOR ADDRESS: Div. Immunol. and Allergy, (Hans Wilsdorf Lab.), Dep. Med., University Hospital, 1211 Geneva 14, Switzerland**Switzerland
JOURNAL: Journal of Biological Chemistry 269 (35): p22027-22033 1994 1994
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: nuclear fractions of the T cells were ineffective. Furthermore, activated T lymphocytes exposed to trypsin, **tunicamycin** , or cycloheximide lost the capacity to stimulate THP-1 cells upon subsequent contact, implying the...

...pretranslational level. Consequently, cell-cell contact may represent an important biological mechanism for potentiating the **inflammatory** response that leads to extracellular matrix destruction.

6/3,K/16 (Item 16 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0009401841 BIOSIS NO.: 199497423126
Overexpression of human prostaglandin G/H synthase-1 and -2 by recombinant vaccinia virus: Inhibition by nonsteroidal anti-inflammatory drugs and biosynthesis of 15-hydroxyeicosatetraenoic acid
AUTHOR: O'Neill G P (Reprint); Mancini J A; Kargman S; Yergey J; Kwan Mei Yee; Falgueyret J-P; Abramovitz M; Kennedy B P; Ouellet M
AUTHOR ADDRESS: Dep. Pharmacol., Merck Frosst Cent. Therapeutic Res., P.O. Box 1005, Pointe Claire-Dorval, QuebecH9R 4P8, Canada**Canada
JOURNAL: Molecular Pharmacology 45 (2): p245-254 1994 1994
ISSN: 0026-895X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: recombinant hPGHS-1 and hPGHS-2 prepared from the microsomal fraction of cells treated with **tunicamycin** , an inhibitor of N-linked glycosylation, were enzymatically inactive. The major prostanoid products formed by...

...6-keto-prostaglandin F-1alpha. A range of potencies were observed for various nonsteroidal anti- **inflammatory** drugs as inhibitors of prostaglandin E-2 synthesis by hPGHS-1 and hPGHS-2. Recombinant...

6/3,K/17 (Item 17 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0008918108 BIOSIS NO.: 199396082524
SERP1, a serine proteinase inhibitor encoded by myxoma virus, is a secreted glycoprotein that interferes with inflammation
AUTHOR: Macen Joanne L (Reprint); Upton Chris; Nation Nick; McFadden Grant

(Reprint)
AUTHOR ADDRESS: Dep. Biochem., Univ. Alberta, Edmonton, Alberta T6G 2H7, Canada**Canada
JOURNAL: Virology 195 (2): p348-363 1993
ISSN: 0042-6822
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: weight of 55 kDa. Using myxoma virus and recombinant vaccinia virus constructs for experiments with **tunicamycin** and peptide N-glycosidase F, it is shown that the secreted SERP1 protein is modified ...

...from infected animals suggest that in the absence of the SERP1 protein, a more effective **inflammatory** response occurs, allowing a more rapid resolution of the infection. This suggests that SERP1 contributes to viral pathogenesis by interacting with cellular component(s) involved in the regulation of **inflammation** .

6/3,K/18 (Item 18 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0008427706 BIOSIS NO.: 199294129547
FAT-STORING CELLS OF THE RAT LIVER SYNTHESIZE AND SECRETE C1 ESTERASE INHIBITOR MODULATION BY CYTOKINES
AUTHOR: SCHWOEGLER S (Reprint); ODENTHAL M; KNITTEL T; MEYER ZUM BUESCHENFELDE K-H; RAMADORI G
AUTHOR ADDRESS: I DEP INTERNAL MED, UNIV MAINZ, LANGENBECKSTRASSE 1, 6500 MAINZ, GER**GERMANY
JOURNAL: Hepatology 16 (3): p794-802 1992
ISSN: 0270-9139
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: hybridization of cells at different times after isolation. By inhibition of the N-glycosylation using **tunicamycin** , rat C1-esterase inhibitor was identified as a glycoprotein. The time course of C1-esterase...

...expression. Because C1-esterase inhibitor synthesis is increased by advancing culture time and by the **inflammatory** mediator interferon-.gamma., we suggest that fat-storing cells may enhance the deposition of extracellular...

6/3,K/19 (Item 19 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0007154361 BIOSIS NO.: 199089072252
THE EFFECT OF CYTOMEGALOVIRUS INFECTION ON THE ADHERENCE OF POLYMORPHONUCLEAR LEUKOCYTES TO ENDOTHELIAL CELLS
AUTHOR: SPAN A H M (Reprint); VAN BOVEN C P A; BRUGGEMAN C A
AUTHOR ADDRESS: UNIV LIMBURG, DEP MED MICROBIOL, PO BOX 616, 6200 MD MAASTRICHT, NETH**NETHERLANDS
JOURNAL: European Journal of Clinical Investigation 19 (6): p542-548 1989

B Bruggeman 1982
205:1

ISSN: 0014-2972
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: leucocytes (PMN) to the endothelial lining of blood vessels is an essential component of the **inflammatory** response. In this study the effect of cytomegalovirus (CMV) infection on the adherence of PMNs...

...infected cells. The augmentation of the PMN adherence to CMV-infected endothelium was sensitive to **tunicamycin** suggesting that the virus infection induces the expression of glycoproteins on the HUVEC membranes which...

6/3,K/20 (Item 20 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0006263347 BIOSIS NO.: 198886103268
INDUCTION OF INTERCELLULAR ADHESION MOLECULE 1 ON PRIMARY AND CONTINUOUS CELL LINES BY PRO-INFLAMMATORY CYTOKINES REGULATION BY PHARMACOLOGIC AGENTS AND NEUTRALIZING ANTIBODIES
AUTHOR: ROTHLEIN R (Reprint); CZAJKOWSKI M; O'NEILL M M; MARLIN S D; MAINOLFI E; MERLUZZI V J
AUTHOR ADDRESS: DEP IMMUNOL, BOEHRINGER INGELHEIM PHARMACEUTICALS INC, 90 E RIDGE, BOX 368, RIDGEFIELD, CONN 06877, USA**USA
JOURNAL: Journal of Immunology 141 (5): p1665-1669 1988
ISSN: 0022-1767
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: was neutralized by cytokine-specific antisera as well as some steroids and the glycosylation inhibitor, **tunicamycin** . Cyclohexamide up-regulated the expression of ICAM-1 on chondrosarcoma cells but had little or...

...of ICAM-1 on the various cell types and provide some insight into the anti- **inflammatory** effects of some pharmacologic agents.

6/3,K/21 (Item 21 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0006175847 BIOSIS NO.: 198886015768
REGULATION OF SYNTHESIS AND SECRETION OF MAJOR RAT ACUTE-PHASE PROTEINS BY RECOMBINANT HUMAN INTERLEUKIN-6 BSF-2-IL-6 IN HEPATOCYTE PRIMARY CULTURES
AUTHOR: ANDUS T (Reprint); GEIGER T; HIRANO T; KISHIMOTO T; TRAN-THI T-A; DECKER K; HEINRICH P
AUTHOR ADDRESS: BIOCHEM INST, UNIV FREIBURG, HERMANN-HERDER-STR 7, D-7800 FREIBURG, FRG**WEST GERMANY
JOURNAL: European Journal of Biochemistry 173 (2): p287-294 1988
ISSN: 0014-2956
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: three major acute-phase proteins and albumin, similar to those

occurring in vivo during experimental **inflammation** . .alpha.2-Macroglobulin and cysteine proteinase inhibitor synthesis was induced 54-fold and 8-fold...

...inhibitor, .alpha.1-antitrypsin and albumin was not affected. The inhibition of N-glycosylation by **tunicamycin** abolished the effect of interleukin-6 on the secretion of .alpha.2-macroglobulin, indicating a...

6/3,K/22 (Item 22 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0005733798 BIOSIS NO.: 198784087947
BIOSYNTHESIS AND REGULATION OF RAT ALPHA-1 INHIBITOR 3 A NEGATIVE ACUTE-PHASE REACTANT OF THE MACROGLOBULIN FAMILY
AUTHOR: GEIGER T (Reprint); LAMRI Y; TRAN-THI T-A; GAUTHIER F; FELDMANN G; DECKER K; HEINRICH P C
AUTHOR ADDRESS: BIOCHEM INST, UNIV FREIBURG, D-7800 FREIBURG, FRG**WEST GERMANY
JOURNAL: Biochemical Journal 245 (2): p493-500 1987
ISSN: 0264-6021
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: determined. A continuous decrease in the level of .alpha.1-inhibitor3 in serum during experimental **inflammation** induced by turpentine injection was demonstrated by means of quantitative 'rocket' immunoelectrophoresis. This result agrees...

...galactose were incorporated only into the form found in the medium. In the presence of **tunicamycin** an unglycosylated .alpha.1-inhibited3 with an apparent Mr of 154000 was found in cells...
...the medium. In a pulse-chase experiment it was shown that inhibition of glycosylation by **tunicamycin** resulted in a marked delay of secretion of .alpha.1-inhibitor3. Thus the oligosaccharide side...
DESCRIPTORS: **TUNICAMYCIN** PHARMACOLOGICAL TOOL **INFLAMMATION** HEPATOCYTE

6/3,K/23 (Item 23 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0004669801 BIOSIS NO.: 198579088700
BIOSYNTHESIS AND SECRETION OF ALPHA-1 ACUTE-PHASE GLOBULIN IN PRIMARY CULTURES OF RAT HEPATOCYTES
AUTHOR: BAUER J (Reprint); KURDOWSKA A; TRAN-THI T-A; BUDEK W; KOJ A; DECKER K; HEINRICH P C
AUTHOR ADDRESS: BIOCHEM INST ALBERT-LUDWIGS-UNIV FREIBURG, HERMANN-HERDER-STRASSE 7, D-7800 FREIBURG, FRG**WEST GERMANY
JOURNAL: European Journal of Biochemistry 146 (2): p347-352 1985
ISSN: 0014-2956
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Experimental **inflammation** in rats led to a 7-fold increase in serum levels of .alpha.1 acute...

...the medium when the transfer of oligosaccharide chains onto the polypeptide chains was blocked by **tunicamycin** . **Tunicamycin** led to a marked delay in .alpha.1-APG secretion.

6/3,K/24 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS
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2290526 NTIS Accession Number: ADA421469/XAB
Tunicamycin Enhances Neuroinvasion and Pathogenicity in Mice with Venezuelan Equine Encephalitis Virus
(Doctoral thesis)
Steele, K. E.
UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD DEPT OF PATHOLOGY.
Corp. Source Codes: 888888888; 435423
2003 134p
Languages: English Document Type: Thesis
Journal Announcement: USGRDR0417
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NTIS Prices: PC A08/MF A02

... alter the blood-brain barrier (BBB) may enhance viral encephalitides. The current studies explored whether **tunicamycin** (TM) and other agents affect the pathogenesis of VEE. Following infection with the molecularly-cloned...

...weight loss than controls. The brains of TM-treated mice had earlier and more severe **inflammation** , neuronal damage, and extravascular fibrinogen and upregulation of several cytokines. Electron microscopy of the brains...

6/3,K/25 (Item 2 from file: 6)
DIALOG(R)File 6:NTIS
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2218400 NTIS Accession Number: ADA394065/XAB
Mechanism of Neurodegeneration Following Viral Infection
(Annual rept. 1 May 2000-30 Apr 2001)
Maheshwari, R. K.
Henry M. Jackson Foundation, Rockville, MD.
Corp. Source Codes: 101149000; 422217
May 2001 63p
Languages: English
Journal Announcement: USGRDR0202
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NTIS Prices: PC A05/MF A01

...cultures, suggesting that IFN-gamma induces the anti-viral activity of neuronal cells. We used **Tunicamycin** (TM) in our studies to understand the

mechanisms of neurodegeneration, based on our earlier observations that TM increases **inflammatory** cytokines with other viruses.

6/3,K/26 (Item 1 from file: 24)
DIALOG(R)File 24:CSA Life Sciences Abstracts

0002827712 IP ACCESSION NO: 6811409
C/EBP Homologous Protein (CHOP) Is Crucial for the Induction of Caspase-11 and the Pathogenesis of Lipopolysaccharide-Induced Inflammation

Endo, Motoyoshi; Mori, Masataka; Akira, Shizuo; Gotoh, Tomomi
Department of Molecular Genetics, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan. Department of Host Defense, Research Institute for Microbial Diseases, Osaka University, Osaka, Japan

Journal of Immunology, v 176, n 10, p 6245-6253, May 2006
PUBLICATION DATE: 2006

PUBLISHER: American Association of Immunologists, 9650 Rockville Pike Bethesda MD 20814-3998 USA, [URL:http://www.jimmunol.org/]

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
ISSN: 0022-1767
FILE SEGMENT: Immunology Abstracts
ABSTRACT:
... determine whether the ER stress-CHOP pathway is involved in the pathogenesis of the lung **inflammation** , mice were given LPS intratracheally. Treatment with LPS induced mRNAs for CHOP and BiP. The LPS-induced **inflammation** in lung, including the IL-1 beta activity in bronchoalveolar lavage fluid, was attenuated in...

...knockout mice. Caspase-11 was also induced by such ER stress inducers as thapsigargin or **tunicamycin** . These results show that CHOP plays a crucial role in the pathogenesis of **inflammation** through the induction of caspase-11.

6/3,K/27 (Item 2 from file: 24)
DIALOG(R)File 24:CSA Life Sciences Abstracts

0002158928 IP ACCESSION NO: 4789449
Monocyte Chemotactic Protein-1 Receptor CCR2B Is a Glycoprotein That Has Tyrosine Sulfation in a Conserved Extracellular N-Terminal Region

Preobrazhensky, AA; Dragan, S; Kawano, T; Gavrilin, MA; Gulina, IV; Chakravarty, L; Kolattukudy, PE*
Neurobiotechnology Center, Ohio State University, 206 Rightmire Hall, 1060 Carmack Road, Columbus, OH 43210, USA, [mailto:kolattukudy.2@osu.edu]

Journal of Immunology, v 165, n 9, p 5295-5303, November 1, 2000
PUBLICATION DATE: 2000

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract

LANGUAGE: English
SUMMARY LANGUAGE: English
ISSN: 0022-1767
FILE SEGMENT: Immunology Abstracts

ABSTRACT:
... to its receptor, CCR2B, plays an important role in a variety of diseases involving infection, **inflammation** , and/or injury. In our effort to understand the molecular basis of this interaction and...

...glycosylated, as N-glycosidase F treatment of the receptor or growth of the cells in **tunicamycin** reduced the receptor size to the same level, from 50 to 45 kDa. Thus, CCR2B...

6/3,K/28 (Item 3 from file: 24)
DIALOG(R)File 24:CSA Life Sciences Abstracts

0002090429 IP ACCESSION NO: 4708363
Biosynthesis and Posttranslational Regulation of Human IL-12

Carra, G; Gerosa, F; Trinchieri, G
Department of Pathology, Section of Immunology, University of Verona, Policlinico di Borgo Roma, 37100, Verona, Italy,
[mailto:abofcb@borgoroma.univr.it]

Journal of Immunology, v 164, n 9, p 4752-4761, May 1, 2000
PUBLICATION DATE: 2000

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
ISSN: 0022-1767
FILE SEGMENT: Immunology Abstracts

ABSTRACT:
... in large excess in a free form, and disulfide-linked beta -chain homodimers with anti- **inflammatory** effects are produced in the mouse. We analyzed the biosynthesis and glycosylation of IL-12...

...modified with sialic acid adducts to N-linked oligosaccharides before secretion. N-glycosylation inhibition by **tunicamycin** (TM) did not alter free beta -chain secretion, while preventing the IL-12 heterodimer assembling...

6/3,K/29 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

15087164 Genuine Article#: 034FL No. References: 42
Title: Diclofenac, a non-steroidal anti-inflammatory drug, suppresses apoptosis induced by endoplasmic reticulum stresses by inhibiting caspase signaling
Author(s): Yamazaki T (REPRINT) ; Muramoto M; Oe T; Morikawa N; Okitsu O; Nagashima T; Nishimura S; Katayama Y; Kita Y
Corporate Source: Astellas Pharma Inc,Pharmacol Res Labs,5-2-3,Tokodai/Tsukuba/Ibaraki 3002698/Japan/ (REPRINT); Astellas

Pharma Inc,Pharmacol Res Labs,Tsukuba/Ibaraki 3002698/Japan/; Astellas Pharma Inc,Lead Discovery Res Labs,Tsukuba/Ibaraki 3002698/Japan/; Astellas Pharma Inc,Mol Med Res Labs,Tsukuba/Ibaraki 3002698/Japan/; Astellas Pharma Inc,Anal & Pharmacokinet Res Labs,Tsukuba/Ibaraki 3002698/Japan/; Kyushu Univ,Fac Engn, Dept Appl Chem, Nishi Ku,Fukuoka 8190395//Japan/; Pfizer Inc,Pfizer Global Res & Dev, Nagoya Labs, Discovery Biol Res,Aichi 4702393//Japan/(takao.yamazaki@jp.astellas.com)

Journal: NEUROPHARMACOLOGY, 2006, V50, N5 (APR), P558-567
ISSN: 0028-3908 Publication date: 20060400
Publisher: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Abstract: Non-steroidal anti- **inflammatory** drugs (NSAIDs) are frequently used in the treatment of **inflammation** and pain. In many reports, NSAIDs have induced apoptosis in a variety of cell lines...

...stress-inducing agents: thapsigargin, an inhibitor of Ca2+-ATPase on the endoplasmic reticulum membrane, and **tunicamycin** , a glycosylation blocker. Other NSAIDs, Such as indomethacin, ibuprofen, aspirin, and ketoprofen, also Suppressed ER...

...of arachidonic metabolism, showed no effects against anti-apoptotic effects produced by diclofenac. Thapsigargin and **tunicamycin** each significantly activated caspase-3, -9, and -2 in the intrinsic apoptotic pathway in SH-SY5Y cells. Diclofenac suppressed the activation of caspases induced by both ER stresses. Thapsigargin and **tunicamycin** decreased the mitochondrial membrane potential in SH-SY5Y cells. Diclofenac suppressed the mitochondrial depolarization induced ...

6/3,K/30 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

15077192 Genuine Article#: 035DH No. References: 38
Title: Efficient sorting of TNF-alpha to rodent mast cell granules is dependent on N-linked glycosylation

Author(s): Olszewski MB; Trzaska D; Knol EF; Adamczewska V; Dastych J (REPRINT)
Corporate Source: Polish Acad Sci,Ctr Med Biol,106 Lodowa St,93-232/PL-93232 Lodz//Poland/ (REPRINT); Polish Acad Sci,Ctr Med Biol,PL-93232 Lodz//Poland/; Int Inst Mol & Cell Biol,Lab Mol Immunol,Warsaw//Poland/; Univ Utrecht,Med Ctr, Dept Dermatol Allergol,Utrecht//Netherlands/(jdastych@cbm.pan.pl)

Journal: EUROPEAN JOURNAL OF IMMUNOLOGY, 2006, V36, N4 (APR), P997-1008
ISSN: 0014-2980 Publication date: 20060400
Publisher: WILEY-V C H VERLAG GMBH, PO BOX 10 11 61, D-69451 WEINHEIM, GERMANY
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: immunological response to bacterial infections and parasite infestations. One of the major mast cell pro- **inflammatory** mediators is TNF-alpha. Mast cells are considered the only cells capable of storing TNF...
...through the mannose-6-phosphate receptor (MPR)-dependent pathway. We observed that ammonium chloride and **tunicamycin** blocked TNF-alpha-EGFP fusion protein delivery to secretory granules. In situ mutagenesis experiments confirmed...

6/3,K/31 (Item 3 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

11966272 Genuine Article#: 713JM No. References: 22
Title: Coupling endoplasmic reticulum stress to cell death program in isolated human pancreatic islets: effects of gene transfer of Bcl-2
Author(s): Contreras JL (REPRINT) ; Smyth CA; Bilbao G; Eckstein C; Young CJ; Thompson JA; Curiel DT; Eckhoff DE
Corporate Source: Univ Alabama,Div Transplantat,748 Lyons Harrison Res Bldg,701 19th St S/Birmingham//AL/35294 (REPRINT); Univ Alabama,Div Transplantat,Birmingham//AL/35294; Univ Alabama,Div Human Gene Therapy,Birmingham//AL/35294
Journal: TRANSPLANT INTERNATIONAL, 2003, V16, N7 (JUL), P537-542
ISSN: 0934-0874 Publication date: 20030700
Publisher: SPRINGER-VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010 USA
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: were infected with an adenoviral vector encoding Bcl-2 and then exposed to brefeldin-A, **tunicamycin** , A23187 and pro-**inflammatory** cytokines. Activation of caspase-12 was analyzed by means of Western blots. Apoptosis was evaluated...

6/3,K/32 (Item 4 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

03038993 Genuine Article#: MY862 No. References: 39
Title: OVEREXPRESSION OF HUMAN PROSTAGLANDIN G/H SYNTHASE-1 AND SYNTHASE-2 BY RECOMBINANT VACCINIA VIRUS - INHIBITION BY NONSTEROIDAL ANTIINFLAMMATORY DRUGS AND BIOSYNTHESIS OF 15-HYDROXYEICOSATETRAENOIC ACID
Author(s): ONEILL GP; MANCINI JA; KARGMAN S; YERGEY J; KWAN MY; FALGUEYRET JP; ABRAMOVITZ M; KENNEDY BP; OUELLET M; CROMLISH W; CULP S; EVANS JF; FORDHUTCHINSON AW; VICKERS PJ
Corporate Source: MERCK FROSST CTR THERAPEUT RES,DEPT PHARMACOL,POB 1005/POINTE CLAIRE H9R 4P8/PQ/CANADA/; MERCK FROSST CTR THERAPEUT RES,DEPT MOLEC BIOL/POINTE CLAIRE H9R 4P8/PQ/CANADA/; MERCK FROSST CTR THERAPEUT RES,DEPT BIOCHEM/POINTE CLAIRE H9R 4P8/PQ/CANADA/; MERCK FROSST CTR THERAPEUT RES,DEPT MED CHEM/POINTE CLAIRE H9R 4P8/PQ/CANADA/
Journal: MOLECULAR PHARMACOLOGY, 1994, V45, N2 (FEB), P245-254
ISSN: 0026-895X
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: recombinant hPGHS-1 and hPGHS-2 prepared from the microsomal fraction of cells treated with **tunicamycin** , an inhibitor of N-linked glycosylation, were enzymatically inactive. The major prostanoid products formed by...
...keto-prostaglandin F-1 alpha. A range of potencies were observed for various nonsteroidal anti- **inflammatory** drugs as inhibitors of prostaglandin E(2) synthesis by hPGHS-1 and hPGHS-2. Recombinant...

6/3,K/33 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

04144799 EMBASE No: 1990027341
The effect of cytomegalovirus infection on the adherence of polymorphonuclear leucocytes to endothelial cells
Span A.H.M.; Van Boven C.P.A.; Bruggeman C.A.
Dept. Medical Microbiology, University of Limburg, P.O. Box 616,6200 MD Maastricht Netherlands
European Journal of Clinical Investigation (EUR. J. CLIN. INVEST.) (United Kingdom) 1989, 19/6 (542-548)
CODEN: EJCIB ISSN: 0014-2972
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...leucocytes (PMN) to the endothelial lining of blood vessels in an essential component of the **inflammatory** response. In this study the effect of cytomegalovirus (CMV) infection on the adherence of PMNs...

...infected cells. The augmentation of the PMN adherence to CMV-infected endothelium was sensitive to **tunicamycin** suggesting that the virus infection induces the expression of glycoproteins on the HUVEC membranes which...

6/3,K/34 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

00540588 JICST ACCESSION NUMBER: 88A0083537 FILE SEGMENT: JICST-E
Fiber formation and its control: Collagen.
TETSUKA TSUNAO (1)
(1) Jichi Medical School
Saishin Igaku, 1987, VOL.42,NO.9, PAGE.1851-1855, FIG.2, TBL.2, REF.23
JOURNAL NUMBER: Z0358AAR ISSN NO: 0370-8241 CODEN: SAIGA
UNIVERSAL DECIMAL CLASSIFICATION: 577.112.016 576.35
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Commentary
MEDIA TYPE: Printed Publication

...ABSTRACT: of animal species, organs, and tissues. Therapy should be directed first at control of the **inflammatory** processes, which generally precede fiber formation. In fibroblasts, transcription may be controlled by cAMP, Ca2...

...chelators, may be coupled with intracellular transport. Another step, one at which such agents as **tunicamycin** and monensin are effective, may also be involved in the transport system. The secretory process...

6/3,K/35 (Item 1 from file: 135)
DIALOG(R)File 135:NewsRx Weekly Reports

0000107889 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Excess Bcl-2 production reverses programmed cell death in beta cells
Biotech Week, October 15, 2003, p.519

DOCUMENT TYPE: Expanded Reporting LANGUAGE: English
RECORD TYPE: FULLTEXT
WORD COUNT: 322

... were infected with an adenoviral vector encoding Bcl-2 and then exposed to brefeldin-A, **tunicamycin** , A23187, and pro- **inflammatory** cytokines. Activation of caspase-12 was analyzed by means of Western blots. Apoptosis was evaluated...

6/3,K/36 (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.

0338458 DBR Accession No.: 2004-10750 PATENT
Pharmaceutical composition useful for treating diabetes, obesity, multiple sclerosis, comprising transferrin protein exhibiting reduced glycosylation and fused to therapeutic protein or peptide - involving vector-mediated gene transfer and expression in yeast cell for use in disease diagnosis, prevention and therapy
AUTHOR: PRIOR C P; SADEGHI H; TURNER A
PATENT ASSIGNEE: BIOREXIS PHARM CORP 2004
PATENT NUMBER: WO 200419872 PATENT DATE: 20040311 WPI ACCESSION NO.: 2004-239108 (200422)
PRIORITY APPLIC. NO.: US 460829 APPLIC. DATE: 20030408
NATIONAL APPLIC. NO.: WO 2003US26778 APPLIC. DATE: 20030828
LANGUAGE: English

...ABSTRACT: chosen from amino acid residue corresponding to amino acids N413 or N611. The compound is **tunicamycin** . (II) comprises N-terminal to C-terminal: a therapeutic protein or peptide, a linker and...

... disease. The chronic disease is chosen from viral disease, cancer, metabolic disease, obesity, autoimmune disease, **inflammatory** disease, allergy, graft-vs.-host disease, systemic microbial infection, anemia, cardiovascular disease, neurodegenerative disease, disorder...

... diabetic or obese (claimed). (I) is useful for treating, preventing and/or diagnosing tissue specific **inflammatory** disorders such as alveolitis, angiocholecystitis, appendicitis, etc., anemia such as hypochromic anemia, microcytic anemia, iron...

6/3,K/37 (Item 2 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.

0275008 DBR Accession No.: 2001-15215 PATENT
Human reducing agent and tunicamycin **-responsive protein-40 and encoded polynucleotide, applicable in diagnosis and treatment of malignant tumor, hemopathy, immunological diseases and various** inflammations **- vector-mediated gene transfer and expression in host cell, antibody, antagonist, agonist, DNA primer, DNA probe and antisense for disease diagnosis and therapy**
AUTHOR: Mao Y; Xie Y
CORPORATE SOURCE: Shanghai, People's Republic of China.
PATENT ASSIGNEE: Shanghai-Bio-Door-Gene-Technology 2001
PATENT NUMBER: WO 200155375 PATENT DATE: 20010802 WPI ACCESSION NO.: 2001-488795 (2053)
PRIORITY APPLIC. NO.: CN 2000111517 APPLIC. DATE: 20000126
NATIONAL APPLIC. NO.: WO 2001CN50 APPLIC. DATE: 20010115
LANGUAGE: CN

Human reducing agent and tunicamycin **-responsive protein-40 and encoded**

polynucleotide, applicable in diagnosis and treatment of malignant tumor, hemopathy, immunological diseases and various inflammations

ABSTRACT: A human isolated recombinant reducing agent and **tunicamycin** -responsive protein-40 (I) with a 363 amino acid protein sequence is claimed. Also claimed...

... further studied. The above can be used for HIV virus infection, immunological diseases and various **inflammation** diagnosis and therapy. (40pp)

DESCRIPTORS: human recombinant reducing agent, **tunicamycin** -responsive protein-40 prep., plasmid, virus vector-mediated gene transfer, expression in host cell, antagonist...

...antisense, drug screening, protein fingerprinting, DNA chip, DNA microarray, appl. malignancy, hemopathy, HIV virus infection, **inflammation** diagnosis, therapy, gene therapy mammal animal DNA amplification hybridization leuko virus retro virus lenti virus...

6/3,K/38 (Item 1 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

135148300 CA: 135(11)148300z PATENT

Human reducing agent and tunicamycin-responsive protein 40 and its cDNA and use thereof

INVENTOR(AUTHOR): Mao, Yumin; Xie, Yi

LOCATION: Peop. Rep. China,

ASSIGNEE: Biodoor Gene Technology Ltd. Shanghai

PATENT: PCT International ; WO 200155375 A1 DATE: 20010802

APPLICATION: WO 2001CN50 (20010115) *CN 2000111517 (20000126)

PAGES: 40 pp. CODEN: PIXXD2 LANGUAGE: Chinese

PATENT CLASSIFICATIONS:

CLASS: C12N-015/12; C07K-014/435; A61K-038/17

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CR; CU; CZ; DE; DK; DM; DZ; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI

DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG

6/3,K/39 (Item 2 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

105113391 CA: 105(13)113391h JOURNAL

Alpha-1-acute phase globulin in the blood of tunicamycin-injected rats. Isolation of the non-glycosylated form, its inhibitory properties and synthesis in liver slices

AUTHOR(S): Koj, A.; Bereta, J.; Dubin, A.; Kurdowska, A.; Chindemi, P.; Regoeczi, E.

LOCATION: Inst. Mol. Biol., Jagellonian Univ., 31-120, Krakow, Pol.

JOURNAL: Folia Histochem. Cytobiol. DATE: 1986 VOLUME: 24 NUMBER: 1

PAGES: 7-14, 3 plates CODEN: FHCYEM LANGUAGE: English

6/3,K/40 (Item 1 from file: 50)

DIALOG(R)File 50:CAB Abstracts

0007110097 CAB Accession Number: 19950406043

Glycosylated and unglycosylated human lactoferrins both bind iron and show identical affinities towards human lysozyme and bacterial lipopolysaccharide, but differ in their susceptibilities towards tryptic proteolysis.

Berkel, P. H. C. van; Geerts, M. E. J.; Veen, H. A. van; Kooiman, P. M.; Pieper, F. R.; Boer, H. A. de; Nuijens, J. H.
Leiden Institute of Chemistry, Medical Biotechnology Department, Gorlaeus Laboratories, Leiden University, Leiden, Netherlands.

Biochemical Journal (London) vol. 312 (1): p.107-114
Publication Year: 1995
ISSN: 0264-6021
Language: English Record Type: Abstract
Document Type: Journal article

... hLF) was studied with respect to properties that are relevant to its antibacterial and anti- **inflammatory** activities. A human kidney-derived 293(S) cell line that constitutively expresses recombinant hLF (rhLF...

...reactivity towards various antibodies of rhLF that were expressed in the absence or presence of **tunicamycin** (which blocks N -linked glycosylation) but did not differ from that of natural (human milk...

... sequence for rhLF and natural hLF. SDS-PAGE of rhLF expressed in the presence of **tunicamycin** revealed a protein with the same molecular weight as that of enzymically deglycosylated natural hLF...

... the C-lobe. Thus the results provide no argument for differential antibacterial and/or anti- **inflammatory** activity of natural and (glycosylated) rhLF and suggest that a major function of glycosylation in ...

6/3,K/41 (Item 1 from file: 393)
DIALOG(R)File 393:Beilstein Abstracts

Beilstein Abstract Id: 6520828
Title: Endoplasmic Reticulum Stress Due to Altered Cellular Redox Status Positively Regulates Murine Hepatic CYP2A5 Expression
Document Type: Journal Record Type: Abstract
Author: Gilmore, W. James; Kirby, Gordon M.
Citation: J. Pharmacol. Exp. Ther. (2004) Series: 308-2, 600 - 608
CODEN: JPETAB Language: English
Abstract Language: English

...Abstract: 2A5 (CYP2A5) is uniquely induced by a variety of agents that cause liver injury and **inflammation** , conditions that are typically associated with downregulation of P450s. We hypothesized that induction of CYP2A5...

... biomarker glucose-regulated protein (GRP) 78. Treatment of primary hepatocytes with ER stress activators thapsigargin, **tunicamycin** , and trans-4,5-dihydroxy-1,2-dithiane (DTT ox) and the calcium ionophore A23187...

6/3,K/42 (Item 1 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

01949054 ORDER NO: AADAA-IC813951
Analysis of the folding and secretion of the heterodimeric pro-inflammatory cytokine interleukin-12 in a recombinant HEK cell system
Author: Alloza Moral, Iraide
Degree: Ph.D.
Year: 2003
Corporate Source/Institution: Queen's University of Belfast (United Kingdom) (0725)
Source: VOLUME 64/04-C OF DISSERTATION ABSTRACTS INTERNATIONAL. PAGE 887

Interleukin-12 (IL-12) is a pro- **inflammatory** cytokine produced by antigen presenting cells (APC), principally macrophages and dendritic cells, and to a...

...beta; heterodimer and the β/β homodimer can be prevented by blocking N-glycosylation with **tunicamycin** . Castanospermine, in the other hand, produced an obvious increase in the secretion of α-chain...
?

Virology
Volume 195, Issue 2 , August 1993, Pages 348-363

doi:10.1006/viro.1993.1385 Cite or Link Using DOI

Regular Article

SERP1, a Serine Proteinase Inhibitor Encoded by Myxoma Virus, Is a Secreted Glycoprotein That Interferes with Inflammation

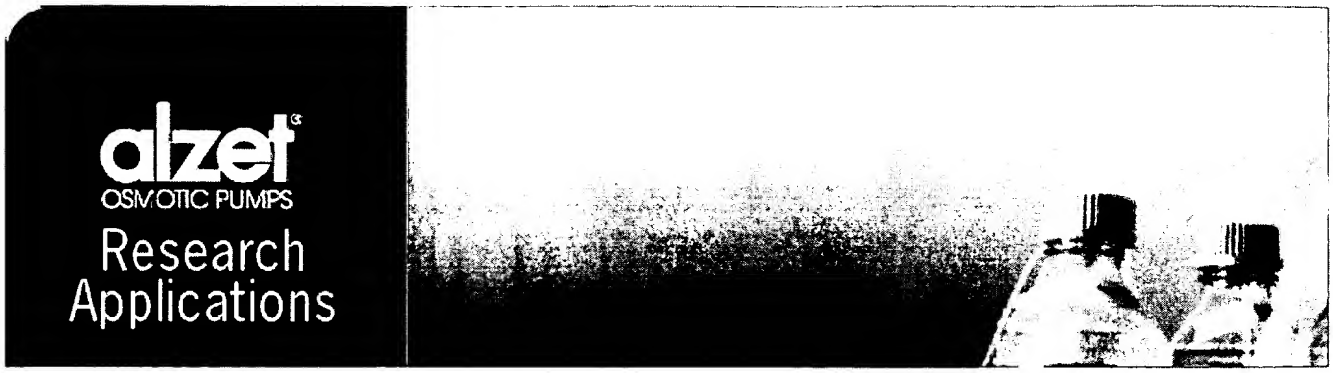
Joanne L. Macen, Chris Upton, Nick Nation and Grant McFadden

Department of Biochemistry and Health Sciences Laboratory Animal Services, University of Alberta, Edmonton, Alberta T6G 2H7, Canada

Available online 27 April 2002.

Abstract

Myxoma virus is a leporipoxvirus that causes a rapidly lethal, generalized infection known as myxomatosis in the European rabbit (*Oryctolagus cuniculus*). A characteristic feature of myxomatosis is the specific downregulation of key pathways important for numerous host defenses against the viral infection. The SERP1 gene has significant sequence similarity to the serpin superfamily of serine proteinase inhibitors and is one of many virulence factor genes located within the terminal regions of the myxoma virus genome. Transcriptional analysis of the SERP1 gene in myxoma virus (strain Lausanne) indicates that it is expressed as a late gene and studies using a polyclonal anti-SERP1 antiserum indicate that it encodes a secreted protein with an apparent molecular weight of 55 kDa. Using myxoma virus and recombinant vaccinia virus constructs for experiments with tunicamycin and peptide N-glycosidase F, it is shown that the secreted SERP1 protein is modified by N-linked glycosylation. Mutation of both copies of the SERP1 gene in myxoma virus results in a significant attenuation of the virus, such that more than 50% of infected animals are able to recover from the otherwise lethal infection. Histological analyses of lesions taken from infected animals suggest that in the absence of the SERP1 protein, a more effective inflammatory response occurs, allowing a more rapid resolution of the infection. This suggests that SERP1 contributes to viral pathogenesis by interacting with cellular component (s) involved in the regulation of inflammation.



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References from 1998-2005 on the Microperfusion of Solid Tissue Using ALZET® Osmotic Pumps (STM-Q3-2005)

The drug solution contained in an ALZET Osmotic Pump may be delivered to a variety of locations distant from the site of pump implantation by using a catheter attached to the exit port of the pump. In this manner, local drug or hormone actions can be tested. In vivo biosynthesis from radiolabelled microperfused precursors and drug/hormone distribution can be demonstrated. The technical notes following each reference detail the substance(s) infused, the route of administration, the animal model studied, the vehicle used for infusion, the pump model used, duration of infusion, and notable technical achievements or results obtained.

References that detail infusion into the brain are contained in a separate listing which can found on our web site at www.alzet.com or requested from ALZET Technical Support at (800) 692-2990 or by email at **alzet@durect.com**.

For a more complete discussion of the capabilities of solid tissue microperfusion, consult the following reference:

R0051 Urquhart, J., Fara, J., and Willis, K.L. Rate?]controlled delivery systems in drug and hormone research. Ann. Rev. Pharmacol. Toxicol. 24, 199?]236, 1984.

P6921 Love,D.A., Lietman,S.A. The effect of osteogenic protein-1 dosing regimen on ectopic bone formation. Clinical Orthopaedics and Related Research 2004; (-423-):264-267. >>> Osteogenic protein-1; Lactic acid; Bone (matrix); Rat; 1002; 14 days; comparison of bolus injections vs. mp; stability verified by in vitro incubation study; silastic tubing used to target the SC implanted bone matrix; tissue perfusion (bone matrix).

P6920 Aronson,J. The Nicolas Andry Award - Modulation of distraction osteogenesis in the aged rat by fibroblast growth factor. Clinical Orthopaedics and Related Research 2004; (-425-):264-283. >>> Fibroblast growth factor, recomb. human; dihydrotestosterone; Sodium citrate; SC; bone (tibia); Rat; 1007D; 1002; 2002; 7, 14 days; Functionality of mp verified by residual volume; comparison of injections vs. mp; post op. care (heated cage/analgesics); pumps used for systemic or targeted delivery; silastic tubing used; "The pumps were well tolerated without inflammatory reaction, infection, or pain." (p. 273); picture of pump and catheter (radiograph image) p. 277, fig 10A-B.

P6547 Aparicio,T., Guilmeau,S., Goiot,H., Tsocas,A., Laigneau,J.P., Bado,A., Sobhani,I., Lehy,T. Leptin reduces the development of the initial precancerous lesions induced by azoxymethane in the rat colonic mucosa. Gastroenterology 2004; 126(-2-):499-510. >>> Leptin, recomb. mouse; Saline; BSA; SC; IP; Intraluminal (colon); Rat; 2ML1; 7,23 days; Controls received mp w/ vehicle; functionality of mp verified by plasma concentrations; comparison of 2 daily colonic lumen injections vs. mp; pumps replaced every 8 days to ensure peptide activity; cancer (colon); peptides.

P6543 Svetlecic,J., Molteni,A., Herndon,B. Bronchiolitis obliterans induced by intratracheal papaverine: A novel animal model. Lung 2004; 182(-2-):119-134. >>> Papaverine; Saline; Intratracheal; Rat; 2004; 28 days; Controls received mp w/ vehicle; no stress (see pg. 123); good methods p. 121; "All the rats survived for the length of the experiments. The intratracheal pump was well tolerated and the procedure produced no overt complications." p. 123; papaverine is an alkaloid in sauropus plants and is responsible for human toxicant-induced CBO (constrictive bronchiolitis obliterans); good picture showing the implantation/cannulation site p. 122; tissue perfusion (trachea).

P6265 Tepel,J., Kruse,M.L., March,C., Fiedler,A., Kapischke,M., Ketterer,T., Sipos,B., Kremer,B., Kalthoff,H. Terminally modified oligodeoxynucleotides directed against p53 in an orthotopic xenograft model: A novel adjuvant treatment strategy for pancreatic ductal carcinoma. Pancreas 2004; 28(-1-):1-12. >>> Oligodeoxynucleotide, antisense; SC; Mice (SCID); 14 days; Tissue perfusion (intratumoral); comparison of IP injections vs. sc mp; cancer (pancreatic ductal carcinoma); transplantation; 200 ul pump used.

P6666 Kawaminami,M., Shibata,Y., Yaji,A., Kurusu,S., Hashimoto,I. Prolactin inhibits annexin 5 expression and apoptosis in the corpus luteum of pseudopregnant rats: Involvement of local gonadotropin-releasing hormone. Endocrinology 2003; 144(-8-):3625-3631. >>> Cetrorelix; Intraovarian; Rat (psuedo pregnant); 1003D; 2 days; Tissue perfusion (hemilateral ovarian bursa); GnRH antagonist.

P6446 Ma,T., Miyanishi,K., Trindade,M.C.D., Genovese,M., Regula,D., Smith,R.L., Goodman,S.B. Interleukin 1 receptor antagonist inhibits localized bone formation in vivo. Journal of Rheumatology 2003; 30(-12-):2547-2552. >>> Interleukin-1, receptor antagonist; Sodium citrate; polysorbate; sodium chloride; disodium EDTA; Bone

(tibia); Rabbit; 2ML2; 4 weeks; Controls received mp w/ BSA and PBS; pumps replaced every two weeks; IL-1ra is human recomb.; drug test chamber (DTC) schematic p.2548.

P6405 Kirk,S.P., Oldham,J.M., Jeanplong,F., Bass,J.J. Insulin-like growth factor-II delays early but enhances late regeneration of skeletal muscle. JOURNAL OF HISTOCHEMISTRY&CYTOCHEMISTRY 2003; 51(-12-):1611-1620. >>> Insulin-like growth factor-II; Acetic acid; culture medium, RPMJ 1640; IM; Rat; 1007D; 7 days; Tissue perfusion (femoris muscle); peptides; IGF-II was recomb. human; vinyl catheter used for IM delivery.

P6072 Goodman,S.B., Song,Y., Yoo,J.Y., Fox,N., Trindade,M.C.D., Kajiyama,G., Ma,T., Regula,D., Brown,J., Smith,R.L. Local infusion of FGF-2 enhances bone ingrowth in rabbit chambers in t he presence of polyethylene particles. JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A 2003; 65A(-4-):454-461. >>> Fibroblast growth factor 2; Heparin; BSA; PBS; Bone (tibia); Rabbit; 2004; 3 weeks; Dose-response (p. 459); pumps replaced every 3 weeks to begin new studies; bone chamber; pump/chamber schematics (p. 455).

P5991 Rubin,J.B., Kung,A.L., Klein,R.S., Chan,J.A., Sun,Y.P., Schmidt,K., Kieran,M.W., Luster,A.D., Segal,R.A. A small-molecule antagonist of CXCR4 inhibits intracranial growth of primary brain tumors. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA 2003; 100(-23-):13513-13518. >>> AMD 3100; PBS; SC; Mice; 21 days; Controls received mp w/ vehicle; tissue perfusion (intratumoral); comparison of 2x daily injections vs. mp; cancer (glioblastoma); CXCR4 antagonist; 0.5 ul/hr pumps used; In vivo tumor imaging performed with IVIS imaging system (Xenogen); bioluminescence imaging (BLI).

P5983 Zou,J., Bretlau,P., Pyykkoe,I., Toppila,E., Olovius,N.P., Stephanson,N., Beck,O., Miller,J.M. Comparison of the protective efficacy of Neurotrophins and antioxidants for vibration-induced trauma. ORL-JOURNAL FOR OTO-RHINO-LARYNGOLOGY AND ITS RELATED SPECIALTIES 2003; 65(-3-):155-161. >>> Brain-derived neurotrophic factor; ciliary neurotrophic factor; Ear (scala tympani); Guinea-pig; 2002; 14 days; tissue perfusion (cochlea); comparison of RWM injections vs. mp; peptides.

P5966 Roguin,A., Avivi,A., Nitecki,S., Rubinstein,I., Levy,N.S., Abassi,Z.A., Resnick,M.B., Lache,O., Melamed-Frank,M., Joel,A., Hoffman,A., Nevo,E., Levy,A.P. Restoration of blood flow by using continuous perimuscular infiltration of plasmid DNA encoding subterranean mole rat Spalax ehrenbergi VEGF. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES O F AMERICA 2003; 100(-8-):4644-4648. >>> DNA, naked; vascular endothelial growth factor, DNA; Water; IM; Mice; 2001; 7 days; Controls received mp w/ saline; tissue perfusion (quadriceps muscle); gene therapy; fenestrated catheter; pump implanted IP; "we have shown that when using plamid DNA, continuous administration is superior to multiple simultaneous IM injections." (p. 4647).

P5835 Svechnikova,I., Gray,S.G., Kundrotiene,J., Ponthan,F., Kogner,P., Ekstrom,T.J. Apoptosis and tumor remission in liver tumor xenografts by 4-phenylbutyrate. INTERNATIONAL JOURNAL OF ONCOLOGY 2003; 22(-3-):579-588. >>> Tubulin, beta; PBS; Ear (scala tympani); Guinea-pig; 2002; 7 days; Controls received mp w/ vehicle; tissue perfusion (cochlea); peptides.

P5774 Torrente,Y., El Fahime,E., Caron,N.J., Del Bo,R., Belicchi,M., Pisati,F., Tremblay,J.P., Bresolin,N. Tumor necrosis factor-alpha (TNF-alpha) stimulates chemotactic response in mouse myogenic cells. CELL TRANSPLANTATION 2003; 12(-1-):91-100. >>> Tumor necrosis factor-a; Saline; IM; Mice; 2002; 5 days; Controls received mp w/ vehicle; tissue perfusion (tibialis anterior muscle); dose-response (p.95 fig M); perforated PE tubing used.

P5673 Wolters,F.L.C., Klis,S.F.L., de Groot,J.C.M.J., Hamers,F.P.T., Prieskorn,D.A., Miller,J.M., Smoorenburg,G.F. Systemic co-treatment with alpha-melanocyte stimulating hormone delays hearing loss caused by local cisplatin administration in guinea pigs. Hearing Research 2003; 179(-1-2-):53-61. >>> Cisplatin; Saline; Ear (cochlea); Guinea-pig; 2002; 1 week; Tissue perfusion (cochlea).

P5670 Eckardt,H., Bundgaard,K.G., Christensen,K.S., Lind,M., Hansen,E.S., Hvid,I. Effects of locally applied vascular endothelial growth factor (VEGF) and VEGF-inhibitor to the rabbit tibia during distraction osteogenesis. Journal of Orthopaedic Research 2003; 21(-2-):335-340. >>> Vascular endothelial growth factor; vascular endothelial growth factor R2/FC chimera; Phosphate buffer; BSA; Bone (tibia); Rabbit; 2ML2; 14 days; Controls received mp w/ vehicle; tissue perfusion (osteotomy site); replacement therapy (distraction osteogenesis); stability verified by in vitro assay for 2 weeks at 37 C. (p. 336);.

P5659 Horiike,O., Shimogori,H., Ikeda,T., Yamashita,H. Protective effect of edaravone against streptomycin-induced vestibulot oxicity in the guinea pig. European Journal of Pharmacology 2003; 464(-1-):75-78. >>> Streptomycin; Saline; Ear (cochlea); Guinea-pig; 2002; 24 hours; tissue perfusion (round window).

P5587 Lefranc,F., Camby,I., Belot,N., Bruyneel,E., Chaboteaux,C., Brotchi,J., Mareel,M., Salmon,I., Kiss,R. Gastrin significantly modifies the migratory abilities of experimental glioma cells. Lab.Invest. 2002; 82(-9-):1241-1252. >>> Gastrin; SC; rat; 1002; 14 days; controls received mp with saline; tissue perfusion (tumor resection cavity); cancer.

P5579 Foster,P.K., Luebke,A.E. A model for perilymphatic fistula induced hearing loss in the guinea pig cochlea. Hearing Research 2002; 167(-1-2-):175-179. >>> Perilymph, artificial; Ear (scala tympani); guinea-pig; ; some animals also received an air bubble ~1.5-2 microliters infused into the scala tympani; tissue perfusion (scala tympani).

P5531 Chen,Y., Lin,S.M., Lai,H.S., Tseng,S.H., Chen,W.J. Effects of irradiated tumor vaccine and continuous localized infusion of granulocyte-macrophage colony-stimulating factor on neuroblastomas in mice. Journal of Pediatric Surgery 2002; 37(-9-):1298-1304. >>> Colony-stimulating factor, GM; PBS; BSA; SC (tumor vaccine injection site); Mice; 1002; 14 days; Controls received mp w/ PBS; immunology; GM-CSF is recombinant murine; tissue perfusion.

P5473 Erami,C., Zhang,H., Ho,J.G., French,D.M., Faber,J.E. Alpha 1-adrenoceptor stimulation directly induces growth of vascular wall in vivo. American Journal of Physiology-Heart and Circulatory Physiology 2002; 283(-4-):H1577-H1587. >>> Norepinephrine; benoxathian; prazosin; KMD-3213; AH11110A; BMY-7378; propranolol; RX-821002; Ringer's, lactated; ascorbate; Perivascular; Rat; 2ML2; 14, 28 days; Tissue perfusion (left carotid wall); pumps replaced after 14 days for prazosin; catheter constructed from thin walled vinyl tubing and fenestrated at end placed near vessel; norepinephrine is a catecholamine; propranolol is a beta adrenoceptor antagonist; all other agents are antagonists alpha antagonists.

P5370 Spiess,A.C., Lang,H.N., Schulte,B.A., Spicer,S.S., Schmiedt,R.A. Effects of gap junction uncoupling in the gerbil cochlea. Laryngoscope 2002; 112(-9-):1635-1641. >>> Proadifen; Ear (round window niche); Gerbil; 2001; 2002; 6-7 or 11-14 days; Tissue perfusion (bulla); no stress (see pg. 1637); Proadifen, also called SKF-525A, is a gap junction uncoupler; the pump and cannula were gas-sterilized prior to filling (note: manufacturer does not recommend sterilizatioin of pumps); "The animals experienced no long-term trauma from either the surgery or the extra bulk of the pump." (p. 1637).

P5357 Walker,T.L., Dass,C.R., Burton,M.A. Enhanced In Vivo tumour response from combination of carboplatin and low-dose c-myc antisense oligonucleotides. Anticancer Research 2002; 22(-4-):2237-2245. >>> Neomycin; Kanamycin; Furosenide; PBS; ear (scala tympani); Guinea-pig; 2004; 86 hours; Tissue perfusion (round window); functionality of mp verified by residual volume; diagram of pump and electrode assembly (p. 94); catheter patency assessed by passing fluid through the line at the end of the experiment; Neomycin infused in pilot study; Kanamycin and furosenide were co-infused in a second study.

P5178 Iwase,M., Kim,K.J., Kobayashi,Y., Itoh,M., Itoh,T. A novel bisphosphonate inhibits inflammatory bone resorption in a rat osteolysis model with continuous infusion of polyethylene particles. Journal of Orthopaedic Research 2002; 20(--):499-505. >>> Polyethylene particles, HDPE; Knee (articular cavity); Rat; 2002; 4-8 weeks; Tissue perfusion (diagram p.501); Arthritis; functionality verified by residual volume; pumps replaced every 2 weeks.

P5102 Skovseth,D.K., Yamanaka,T., Brandtzaeg,P., Butcher,E.C., Haraldsen,G. Vascular morphogenesis and differentiation after adoptive transfer of human endothelial cells to immunodeficient mice. American Journal of Pathology 2002; 160(-5-):1629-1637. >>> Interferon-gamma; Abdominal wall; mice; 2004; ; tissue perfusion (abdominal wall); immunology; peptides; pump implanted SC, catheter tube perfused matrigel plug in abdominal wall..

P5087 Dufourcq,P., Couffinhal,T., Alzieu,P., Daret,D., Moreau,C., Duplaa,C., Bonnet,J. Vitronectin is up-regulated after vascular injury and vitronectin blockade prevents neointima formation. Cardiovascular Research 2002; 53(--):952-962. >>> Antibody, monoclonal anti-vitronectin; Antibody, monoclonal anti-B3 integrin; Antibody, monoclonal anti-avB5 integrin; PBS; Immunoglobulin G, non-immune; perivascular (carotid artery adventitia); rat; 7 days; controls received control immunoglobulin; tissue perfusion (corotid adventitia); cardiovascular; peptides.

P5065 Tanaka,H, Wakisaka,A, Ogasa,H, Kawai,S Journal of Endocrinology 2002; 174(--):63-70. >>> Platelet-derived growth factor; Insulin-like growth factor I; SC; bone (femur); rat; 5 days; controls received mp w/ vehicle; tissue perfusion (bone); functionality of mp verified by residual aspiration (p. 64); peptides; growth factors were human recombinant; agents infused separately or concomitantly;.

P5061 Moss,T.J.M., Newnham,J.P., Willett,K.E., Kramer,B.W., Jobe,A.H., Ikegami,M. Early gestational intra-amniotic endotoxin - Lung function, surfactant, and morphometry. AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE 2002; 165(--):805-811. >>> Endotoxin, E. coli; Saline; Amniotic sac; sheep (lamb, fetus); 2ML4; 4 weeks; controls received mp w/ vehicle; tissue perfusion (amniotic sac); comparison of intra-amniotic injections vs. mp; immunology; teratology; pre-natal lung development.

P5051 Ahn,Y.M., Gajdusek,C., London,S., Moon,C.T., Oh,C.W., Mayberg,M.R. Sustained arterial narrowing after prolonged exposure to perivascular endothelin. Neurosurgery 2002; 50(--):843-848. >>> Endothelin-1; Saline; Perivascular (femoral artery adventitia); rat; 3 or 5 days; controls received mp w/ vehicle; tissue perfusion (adventitia); cardiovascular; peptides; ET-1 is a vasoconstrictor peptide; Arteries perfused via a custom silastic artery cuff attached to catheter tube; pump placed sc.

P5044 Nakanishi,T., Kawasaki,K., Uchio,Y., Kataoka,H., Terashima,M., Ochi,M. AG-041R, a cholocystokinin-B/gastrin receptor antagonist, stimulates the repair of osteochondral defect in rabbit model. European Journal of Pharmacology 2002; 439(--):135-140. >>> AG-041R; DMSO; saline; knee (articular cavity); rabbit; 2002; 2 weeks; controls received mp w/ vehicle; tissue perfusion (knee joint).

P5043 Wang,J., Dib,M., Lenoir,M., Vago,P., Eybalin,M., Hameg,A., Pujol,R., Puel,J.L. Riluzole rescues cochlear sensory cells from acoustic trauma in the guinea-pig. Neuroscience 2002; 111(-3-):635-648. >>> Riluzole; Perilymph, artificial; Ear (cochlea); guinea-pig; 2001; 7 days; controls received mp w/ vehicle; tissue perfusion (cochlea); 2-day recovery period. Schematic of pump infusing to inner ear (p. 636). Riluzole is a neoroprotective agent (also called 1-amino-6-trifluoromethoxy benzothiazole). Paper states the use of 1003D, but specifications indicate model 2001 was used.

P5009 Shinohara,T., Bredberg,G., Ulfendahl,M., Pyykko,I., Olivius,N.P, Kaksonen,R., Lindstrom,B., Altschuler,R., Miller,J.M. Neurotrophic factor intervention restores auditory function in deafened animals. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA 2002; 99(-3-):1657-1660. >>> Brain-derived neurotrophic factor; Ciliary neurotrophic factor; Neomycin;; Perilymph, artificial; Ear (scala tympani); guinea-pig; 2002; 26 days; controls received mp w/ vehicle; tissue perfusion (cochlea, scala tympani); pumps replaced at day 15; peptides; catheter filled with perilymph and 10% neomycin; pump filled with vehicle or neurotrophic factor solution; 48-hr infusion of neomycin to cause deafness followed by 12 or 26 day infusion of

neurotrophic factor pump reservoir..

P5019 Moore,A.F., Heiderstadt,N.T., Huang,E., Howell,N.L., Wang,Z.Q., Siragy,H.M., Carey,R.M. Selective inhibition of the renal angiotensin type 2 receptor increases blood pressure in conscious rats. Hypertension 2001; 37(--):1285-1291. >>> Oligodeoxynucleotide, antisense; Oligodeoxynucleotide, sense;; Ringer's solution, lactated; Kidney (renal cortex); rat; 2001; 7 days; controls received sense ODN or vehicle w/ mp; tissue perfusion (left renal interstitial space); cardiovascular.

P5006 Hiraki,Y., Shukunami,C., Iyama,K., Mizuta,H. Differentiation of chondrogenic precursor cells during the regeneration of articular cartilage. OSTEOARTHRITIS AND CARTILAGE 2001; 9(--):S102-S108. >>> Fibroblast Growth Factor 2; Antibody, beta-FM-1; Immunoglobulin G;; Saline; Knee (articular cavity); rabbit; 2002; 2 weeks; Arthritis; controls received mp w/ vehicle; tissue perfusion (knee joint); peptides; Silastic tubing used; Pump placed SC in hind leg region; Antibody adminstered to block effects of FGF-2; IgG administered as antibody control;.

P4999 Tamada,H., Sakaguchi,H., Inaba,T., Kawate,N., Sawada,T. The effect of transforming growth factor-alpha on the progression of decidualization in rats. LIFE SCIENCES 2001; 69(--):1549-1558. >>> Transforming growth factor-a; PB1 medium; Intrauterine; rat; 2001; 2 days; controls received mp w/ vehicle; tissue perfusion (uterine horn lumen); TGF-a was recombinnant human.

P4972 O'Leary,S.J., Klis,S.F.L., de Groot,J.C.M.J., Hamers,F.P.T., Smoorenburg,G.F. Perilymphatic application of cisplatin over several days in albino guinea pigs: dose-dependency of electrophysiological and morphological effects. Hearing Research 2001; 154(--):135-145. >>> Cisplatin; Saline; Ear (cochlea); guinea-pig; 2002; 7 days; tissue perfusion (scala tympani); dose-response (Fig. 1-8); ototoxicity; in-house cochlear cannula used (modified); hearing loss; "the pump model has several advantages: 1) there appears to be less inter-animal variability than via systemic administration; 2) cisplatin dosage can be studied parametrically; 3) the effects of systemic toxicity are avoided" (p. 144).

P4971 Orsini,G., Zalzal,Y., Nanci,A. Localized infusion of tunicamycin in rat hemimandibles: Alteration of the basal lamina associated with maturation stage ameloblasts. JOURNAL OF HISTOCHEMISTRY&CYTOCHEMISTRY 2001; 49(--):165-176. >>> Tunicamycin; Saline; bone (mandible); rat; 2001; ; controls received mp w/ vehicle; tissue perfusion (bony elevation over incisor);article incorrectly states use of 2001D pump, but states 7 day delivery period and pump; Tunicamycin is an antibiotic that interferes with N-glycosylation;.

P4930 Buffelli,M., Pasino,E., Cangiano,A. In vivo acetylcholine receptor expression induced by calcitonin gene-related peptide in rat soleus muscle. Neuroscience 2001; 104(-2-):561-567. >>> Calcitonin gene-related peptide; Saline; IM (soleus); rat; 2002; ; controls received mp w/ vehicle; tissue perfusion (soleus muscle extrajunctional surface).

P4902 Jelic,M., Pecina,M., Haspl,M., Kos,J., Taylor,K, Maticic,D, McCartney,J, Yin,S., Rueger,D., Vukicevic,S. Regeneration of articular cartilage chondral defects by osteogenic protein-1 (bone morphogenetic protein-7) in sheep. Growth Factors 2001; 19(--):101-113. >>> Osteogenic protein-1; Acetate buffer; knee (articular cavity); sheep; 2002; 14 days; controls received mp w/ vehicle; tissue perfusion (knee joint defect); functionality of mp verified by aspiration of residual volume after explant; stability verified by in vitro compatibility tests, ELISA, HPLC; good methods (in vitro bio-compatibility table 1 p. 106); OP-1 is also known as BMP-7. Pump was stapled to femoral shaft, PE-60 catheter tubing perfused knee joint; "Results of this study suggest that a recombinant BMP delivered via a mini-osmotic pump into the joint fluid stimulate the repair of articular cartilate defects in sheep." p. 106;.

P4828 Buffelli,M., Busetto,G., Cangiano,A. The use of in vivo direct drug application to assess neural regulation of muscle properties.. Journal of Neuroscience Methods 2001; 106(--):113-120. >>> Tetrodotoxin; Potassium Chloride; Calcitonin gene-related peptide;; Saline; Dye, methylene blue;; IM (soleus); rat;; 2001; 2002;; 3 - 8 days;; Controls received mp w/ vehicle; tissue perfusion (soleus muscle); detailed methods for catheter construction and surgical procedures (p. 114 - 115); Lynch coil technique used; pump filled w/ saline and agents loaded in modified PE-100 tubing; solutions separated by oil drop; pumps w/ various flow rates were tested but model 2002 was chosed because its small flow rate permits to avoid excessive fluid accumulation on muscle surface; diagram of pump-catheter assembly and location (p. 114);.

P4821 Luebke,A.E., Steiger,J.D., Hodges,B.L., Amalfitano,A. A modified adenovirus can transfect cochlear hair cells in vivo without compromising cochlear function.. Gene Therapy 2001; 8(--):789-794. >>> NT-3; Brain-derived neurotrophic factor; Perilymph, artificial; Ear (scala tympani); guinea-pig; 2002; ; controls received mp w/ vehicle; tissue perfusion (cochlea); functinality of mp verified by residual volume assessment; peptides; in-house catheter created for tissue perfusion;.

P4838 Goodman,S., Song,Y., Chun,L., Aspenberg,P., Plouhar,P., Glancy,T., Regula,D., Smith,R.L. Effects of local infusion of TGFb on bone ingrowth in rabbit chambers.. Journal of Biomedical Materials Research 2000; 53(--):475-479. >>> Transforming growth factor-B1;; Gelatin; Sodium acetate;; Bone (tibia);; rabbit;; 2001D; 2001;; 1 week; 1 day;; Peptides; growth factor treatment consisted of 1 day infusion with 2001D pumps or 1 week infusion with 2001 pumps, followed by carrier infusion for 3 weeks; carrier solution consisted of 1% gelatin, 20 mm sodium acetate; TGF infusion into drug test chamber implanted in the tibia;.

P4830 Yang,G.S.Y., Song,H.T., Keithley,E.M., Harris,J.P. Intratympanic immunosuppressives for prevention of immune-mediated sensorineural hearing loss.. American Journal of Otology 2000; 21(--):499-504. >>> Dexamethasone;; PBS;; Ear (round window membrane);; guinea-pig;; 2002;; ; Controls received mp w/ vehicle; tissue perfusion (bulla); comparison of IP injections vs. mp; multiple pumps per animal (2) (one containing dexamethasone for one ear, the other containing PBS for the other ear);.

P4770 Rauch,F., Lauzier,D., Travers,R., Glorieux,F., Hamdy,R. Effects of locally applied transforming growth factor-

b1 on distraction osteogenesis in a rabbit limb-lengthening model.. Bone 2000; 26(--):619-624. >>> Transforming growth factor-B1;; bone (tibia);; rabbit;; 2ML4;; 3 weeks;; Controls received mp w/ vehicle; tissue perfusion (osteotomy site via catheter); functionality of mp verified by aspirate residual volume after pump removal; no stress (see pg. 620); stability verified by fibroblast cell growth compared w/ fresh solution 7, 14, 21; peptides; dosage of TGF-b1 was 0, 10, 20, or 40 mg/day; delayed drug delivery for 7 days;.

P4743 Shimogori,H, Yamashita,H Neuroscience 2000; 294(--):21-24. >>> Betamethasone;; Saline;; ear (cochlea);; guinea-pig;; 2002;; 2 weeks;; Controls received mp w/ vehicle; tissue perfusion (scala tympani); glucocorticoids; local and systemic antibiotics given to prevent infection;.

P4733 Conlon,B.J, Smith,D.W Acta Otolaryngol. 2000; 120(--):596-599. >>> Neomycin; lipoic acid, alpha; Saline; Ear (round window); Guinea-pig; 2ML4; 7 days; Controls received mp w/ vehicle; tissue perfusion (round window); no stress (see pg. 597); Neomycin antibiotic solution was 5%; micro polyurethane tubing used; the authors state that ALZET delivery system more closely approximates the clinical situation of repeated otic application, with minimal middle ear trauma..

P4730 Duan,M., Agerman,K, Ernfors,P., Canlon,B. Complementary roles of neurotrophin 3 and a N-methyl-D-aspartate antagonist in the protection of noise and aminoglycoside-induced ototoxicity.. PNAS 2000; 97(-13-):7597-7602. >>> NT-3; Amikacin;; Perilymph, artificial;; Ear (cochlea);; guinea-pig;; 2ML2;; 15 days;; Antibiotic; Controls received mp w/ vehicle; tissue perfusion (scala tympani); Amikacin is an aminoglycoside antibiotic; Group 1 received amikacin, Group 2 received vehicle, Group 3 received amikacin and NT-3; All treatment groups received drug for 1 day, followed by 2 weeks perilymph;.

P4347 Lara,H.E., Dissen,G.A., Leyton,V., Paredes,A., Fuenzalida,H., Fiedler,J.L., Ojeda,S.R. An increased intraovarian synthesis of nerve growth factor and its low affinity receptor is a principal component of steroid-induced polycystic ovary in the rat. Endocrinology 2000; 141(-3-):1059-1072. >>> Antibody, nerve growth factor, polyclonal; Oligonucleotide, antisense phosphothionate;; Intraovarian;; rat;; 2ML4;; 56 days;; controls received mp with preimmune serum; tissue perfusion (bursa of ovary); long-term study, pumps replaced after 28 days; peptides; antisense; agents infused from same pump;.

R0163 De Luca,F., Baron,J. Control of Bone Growth by Fibroblast Growth Factors. Trends Endocrinol Metab 1999/3; 10(-2-):61-65. >>> Fibroblast growth factor, basic; Bone (tibia); Rabbit; 6 days; Controls received mp w/ vehicle; tissue perfusion (epiphyseal bone); peptides; Infusion to proximal tibial growth accomplished w/ minipump attached to fine needle; pump use briefly mentioned in fig. 2 (p.63).

R0158 Laham,R.J., Hung,D., Simons,M. Therapeutic myocardial angiogenesis using percutaneous intrapericardial drug delivery. Clin.Cardiol. 1999/1; 22(-1 Suppl 1-):I6-I9. >>> Fibroblast growth factor, basic; Vascular endothelial growth factor; Heparin; Intrapericardial space; Perivascular (coronary circumflex artery); Rabbit; Pig; ; Cardiovascular; peptides; review of various models of intrapericardial drug administration.

P4641 Alino,S.F, Crespo,J, Tarrason,G, Blaya,C, Adan,J, Escrig,E, Benet,M, Crespo,A, Piulats,J Tumor Targeting 1999; 4(--):20-28. >>> Oligonucleotide, antisense;; HEPES, buffered saline; Liposomes;; IM;; mice (scid);; 2001;; 7 days;; tissue perfusion (hind leg muscle); cancer; antisense;.

P4616 Correia,A.G, Bergström,G, Lawrence,A.J, Evans,R.G Am.J.Physiol.(Regulatory Integrative Comp.Physiol.46) 1999; 277(--):R112-R122. >>> Saline;; Kidney (renal medulla);; rabbit;; 2ML2;; 7, 14 hours;; tissue perfusion (kidney); saline infused to ensure catheter patency for later acute experiments..

P4552 Nair,T.S, Prieskorn,D.M., Miller,J.M., Dolan,D.F., Raphael,Y, Carey,T.E. KHRI-3 monoclonal antibody-induced damage to the inner ear: antibody staining of nascent scars.. Hearing Research 1999; 129(--):50-60. >>> Antibody, KHRI-3 monoclonal;; Medium, serum free;; ear (cochlea);; guinea-pig;; 2002;; 14 days;; controls received mp w/vehicle; tissue perfusion (scala tympani); immunology;.

P4541 Olmedo,M.L, Landry,P.S, Sadasivan,K.K, Albright,J.A, Meek,W.D, Routh,R, Marino,A.A Journal of Orthopaedic Trauma 1999; 13(-5-):356-362. >>> Interleukin-1, beta;; PBS;; bone (tibia);; rat;; 1003D;; 3days;; controls received mp w/vehicle; immunology; peptides;.

P4471 Han,J.J, Mhatre,A.N., Wareing,M, Pettis,R, Gao,W.-Q., Zufferey,R.N, Trono,D, Lalwani,A.K. Transgene expression in the guinea pig cochlea mediated by a lentivirus-derived gene transfer vector.. Human Gene Therapy 1999/7/20; 10(--):1867-1873. >>> Lentivirus;Gene, gren fluorescent protein; Saline; PBS;; ear (cochlea);; guinea-pig;; 1007D;; 8, 3 days;; controls received mp w/vehicle; tissue perfusion (scala tympani); gene therapy;.

P4446 Gupta,S, Rajvanshi,P, Aragona,E, Lee,C-D, Yerneni,P.R, Burk,R.D Am.J.Physiol.(Gastrointest.Liver Physiol.39) 1999; 276(--):G629-G638. >>> Hepatocyte growth factor;; NaCl; Dextran sulfate;; Spleen;; rat; mice;; 2001; 2ML1;; 7 days;; tissue perfusion (spleen); peptides; recomb. human growth factor used; mice implanted w/2001; rats implanted w/2ML1;.

P4436 Wareing,M, Mhatre,A.N, Pettis,R, Han,J.J, Haut,T, Pfister,M.H.F, Hong,K, Zheng,W.W, Lalwani,A.K Hearing Research 1999; 128(--):61-69. >>> Liposomes, cationic; Gene, beta-galactosidase; Dextrose solution;; ear;; guinea-pig;; 1007D;; ; tissue perfusion (cochlea); comparison of micro injections vs. mp; stress/adverse reaction: significant fibrosis and acute immune response localized at the site of cochleostomy; gene therapy; prophylactic antibiotics provided; PE50 tubing was connected to PE10;.

P4402 Vu,D.-D., Daniel,N.G., Nanci,A. In vivo model for the experimental manipulation of calcified tissues: A surgical approach for accessing the odontogenic organ and associated tissues of the rat incisor;. Journal of Histochemistry and Cytochemistry 1999; 47(-3-):323-336. >>> Vinblastine sulfate; fetuin-gold; BSA, dinitrophenol-tagged-; Saline, physiological; Bone; Rat; 1003D; 2001D; 1, 3 days; controls received mp with

vehicle; tissue perfusion (alveolar bone); "Minipumps...are advantageous compared to microinjection because they can deliver, in a controlled and continuous manner, relatively large amounts of experimental agents through a bony window" p. 325;.

P4163 Fazleabas,A.T., Donnelly,K.M., Srinivasan,S., Fortman,J.D., Miller,J.B. Modulation of the baboon (papio anubis) uterine endometrium by chorionic gonadotrophin during the period of uterine receptivity. Proc.Natl.Acad.Sci.USA 1999; 96(--):2543-2548. >>> Gonadotrophin, recomb. human chorionic; intraovarian (corpus luteum); baboon; 2ML1; 7 days; tissue perfusion (corpus luteum).

P4106 Carvalho,G.J., Lalwani,A.K. The effect of cochleostomy and intracochlear infusion on auditory brain stem response threshold in the guinea pig. Am.J.Otology 1999; 20(--):87-90. >>> Perilymph, artificial; Saline; ear (cochlea); guinea-pig; 2002; no duration posted; controls received mp w/saline; tissue perfusion (cochlea); good methods (p. 88); good diagram of pump placement (p. 88).

P4574 Kurek,J.B, Bower,J.J, White,J.D., Muldoon,C.M, Austin,L. Leukaemia inhibitory factor and other cytokines as factors influencing regeneration of skeletal muscle.. Basic Appl.Myol 1998; 8(-5-):347-360. >>> Leukemia inhibitory factor; Interleukin-6; Transforming growth factor-a;; PBS;; IM;; mice;; 7 days;; controls received mp w/vehicle; tissue perfusion (vastus lateralis muscle); peptides; targeted delivery of growth factors to the site of muscle injury via a cannula; "drug delivery targeted to a discrete tissue or organ offers signicant advantages over systemic administration". (p. 355).

P4433 Adams,G.R, McCue,S.A J.Appl.Physiol. 1998; 4(-5-):1716-1722. >>> Insulin-like growth factor I; Growth hormone, recomb. human ; Fibroblast growth factor, basic;; Saline;; IM;; rat;; 2004; 2002;; 2, 3 weeks;; controls received mp w/saline; tissue perfusion (tibialis anterior muscle); functionality of mp verified by residual volume and plasma levels; good methods (p. 1717); peptides; fenestrated catheter used; recomb. human IGF-I used; tygon tubing was fenestrated using microtipped soldering iron and bonded to c-flex tubing;.

P4426 Sheen-Chen,S.M, Chau,P, Harris,H.W Journal of Surgical Research 1998; 80(--):205-209. >>> Taurocholate, Sodium;; Water;; intragastric;; rat;; 2ML1;; 7 days;; controls received mp w/vehicle; tissue perfusion (gastrostomy); Sodium taurocholate used as intestinal bile salt replacement is intestinal bile salt..

P4298 Kim,K.J., Kobayashi,Y., Itoh,T. Osteolysis model with continuous infusion of polyethylene particles. Clinical Orthopaedics and Related Research 1998; (-352-):46-52. >>> Polyethylene particles;; Serum, rat;; knee (articular cavity);; rat;; 4-10 weeks;; controls received mp w/ vehicle; tissue perfusion (joint knee cavity); long-term study, pumps replaced every 2 weeks; diagram of model (p. 47); "In the clinical setting, wear debris are generated continuously... (T)herefore, there is a need...(for)..an in vivo model...(for) continuous infusion of wear particles" (pp. 46-47); filling tube was implanted into knee joint cavity;.

P4225 Yamasoba,T., Dolan,D.F. The medial cochlear efferent system does not appear to contribute to the development of acquired resistance to acoustic trauma. Hear.Res. 1998; 120(--):143-151. >>> Strychnine; Ringer's solution; ear (cochlea); guinea-pig; 2002; 14 days; tissue perfusion (scala tympani); no stress (p. 149); good methods (p. 145); detailed cannula preparation and implantation procedures (p. 145); "osmotic pump implantation itself did not influence noise-induced cochlear damage" (p. 149).

P4130 Roelofs,M., Faggian,L., Pampinella,F., Paulon,T., Franch,R., Chiavegato,A., Sartore,S. Transforming growth factor b1 involvement in the conversion of fibroblasts to smooth muscle cells in the rabbit bladder serosa. Histochemical J. 1998; 30(--):393-404. >>> Transforming growth factor-B1; Epidermal growth factor; Fibroblast growth factor, basic; Colony-stimulating factor, G; Platelet-derived growth factor; Colony-stimulating factor, GM; PBS; bladder wall; rabbit; 2ML2; 2ML4; no duration posted; controls received mp w/PBS; no stress (see pg. 395); "a minipump filled with Evans Blue solution was used to determine area of growth factor delivery"; peptides; tissue perfusion (bladder wall).

P4127 Kuntz,A.L., Oesterle,E.C. Transforming growth factor-a with insulin induces proliferation in rat utricular extrasensory epithelia. Otolaryngol Head Neck Surg 1998; 118(--):816-824. >>> Thymidine; Transforming growth factor-a; Insulin; 3H tracer; Radio-isotopes; ear (cochlea); rat; 1003D; 2001; 3,7 days; controls received mp w/vehicle; tissue perfusion (cochlea); agents infused singly or concomitantly in same pump; ALZET brain infusion kit 1 was modified for cochlear infusion; peptides.

P4112 Hautmann,S., Huland,E., Wulbrand,A., Friedrich,M., Huland,H. Treatment of metastatic hormone refractory adenocarcinoma of the prostate (mat ly ly) with micro-osmotic interleukin-2 pump in male copenhagen rats. Eur.Urol. 1998; 34(--):265-266. >>> Interleukin-2; Albumin; intratumoral; rat; no duration posted; controls received mp w/albumin; tissue perfusion (intratumoral); cancer; immunology; peptides.

P4028 Lalwani,A.K., Walsh,B.J., Reilly,P.G., Carvalho,G.J., Zolotukhin,S., Muzyczka,N., Mhatre,A.N. Long-term in vivo cochlear transgene expression mediated by recombinant adeno-associated virus. Gene Therapy 1998; 5(--):277-281. >>> Virus, adeno-associated; Gene, lacZ; Gene, green fluorescent protein; Saline; ear (cochlea); guinea-pig; no duration posted; controls received mp w/vehicle; tissue perfusion (cochlea); functionality of mp verified by gene expression; gene therapy.

P4027 Lalwani,A.K., Walsh,B.J., Carvalho,G.J., Muzyczka,N., Mhatre,A.N. Expression of adeno-associated virus integrated transgene within the mammalian vestibular organs. Am.J.Otology 1998; 19(--):390-395. >>> Virus, adeno-associated; Gene, green fluorescent protein; Gene, beta-galactosidase; PBS; ear (cochlea); guinea-pig; 1007D; 7 days; controls received mp w/vehicle, mp w/reporter gene, or no pump; tissue perfusion (scala tympani); gene therapy.

P4026 Rodgers,K.E., Girgis,W., Amand,K.St., Campeau,J.D., diZerega,G.S. Reduction of adhesion formation by intraperitoneal administration of various anti-inflammatory agents. J.Invest.Surgery 1998; 11(--):327-339. >>>

Retinoic acid; Quinacrine; Dipyridamole; PBS; Ethanol; surgical injury site; rabbit; 2ML1; 1, 2, 3, 7 days; controls received mp w/vehicle; tissue perfusion (surgical injury site); animals given morphine i.m. for post-operative pain; catheter stabilized in sidewall w/suture; in some studies, catheter tubing was disconnected to halt flow at specific times; immunology.

P3980 Matthys,K.E., Van Hove,C.E., Kockx,M.M., Andries,L.J., Van Osselaer,N., Herman,A.G., Bult,H. Exposure to oxidized low-density lipoprotein in vivo enhances intimal thickening and selectively impairs endothelium-dependent dilation in the rabbit. Cardiovasc.Res. 1998; 37(--):239-246. >>> Lipoprotein, oxidized low density-; PBS; perivascular (carotid artery); rabbit; 3, 14 days; controls received mp w/vehicle; peptides; cardiovascular; oxLDL delivered to inside of carotid cuff.

P3917 Hutson,J.M., Watts,L.M., Farmer,P.J. Congenital undescended testes in neonatal pigs and the effect of exogenous calcitonin gene-related peptide. J.Urol. 1998; 159(--):1025-1028. >>> Calcitonin gene-related peptide; scrotal; pig (neonate); 2002; 2 weeks; controls received mp w/PBS; tissue perfusion (undescended testes); replacement therapy (cryptorchidism); dose-response; peptides; "Injection of excess CGRP into the scrotum may delay descent...the pig model has overcome some of these difficulties as the osmotic pump allowed precise, continuous release of low levels of CGRP." (pg. 1027);"Inguinal testes moved closer to the osmotic pumps containing CGRP...(while) CGRP injections into the scrotum in neonatal mice actually inhibited descent rather than promoting it." (pg. 1027).

P3787 Bosmans,J.M, Vrints,C.J, Kockx,M.M, Bult,H, Cromheeke,K.M.C, Herman,A.G. Continuous perivascular L-arginine delivery increases total vessel area and reduces neointimal thickening after experimental balloon dilatation. Arterioscler Thromb Vasc Biol 1998; 19(-3-):767-776. >>> Arginine,L-; L-NAME; Water, deionized; Perivascular; Rabbit; 2ML2; 2 weeks; Controls received mp w/ saline; functionality of mp verified by residual volume; cardiovascular; Restenosis; L-arginine plasma levels checked.

top of page